Safety Net Review

Prepared for

Federal/Provincial/Territorial Ministers of Agriculture

Prepared by

The Federal/Provincial Safety Net Working Group

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CHAPTER 1: INTRODUCTION

In Whitehorse in June 2001, federal, provincial and territorial ministers of agriculture agreed in principle to a national action plan to make Canada the world leader in food safety, innovation and environmental protection. Among the various elements of this plan, a key component is to improve farmers' ability to manage the inherent risks of farming through safety net programming.

In order to realize this goal, ministers recognized that it is critical for the work underway on the evaluation of safety nets to be continued. Specifically, Ministers wish that an analysis of safety net and disaster programs proceed, along with a review of safety net and disaster program objectives and parameters, and the identification of options to improve program performance. Furthermore, this review will build upon requirements as set out in the Safety Net Framework Agreement (see Annex 8 and 9), with a view to future objectives and principles.

It is important to keep in mind that it remains early in the life of the Framework Agreement to undertake a comprehensive assessment or evaluation of its performance, just as it is early in the evolution of the disaster programs (AIDA and CFIP) to fully appreciate their effectiveness, or lack thereof. Therefore, the comprehensiveness of this assessment is limited by the lack of historical evidence. In an effort to overcome the limitations of time, a number of models have been developed to assist in clarifying program performance.

The Road to 2001

In the years leading to Whitehorse safety net objectives and principles have evolved, often in response to ongoing adjustments in the sector. The policy objectives of income support have in large part given way to those of income stabilization, and more recently to risk management. As these objectives have evolved, so to have programs. Commodity specific price support has largely given way to targeted whole farm income stabilization programs. In part, this evolution was brought about because of concerns about deficits and debt, and because of the pressures of international trade agreements. However, there was recognition that commodity support programs provided farmers with a set of incentives which could easily influence decisions about production and marketing, effectively masking the signals of the market. In terms of safety net programs the evolution has been from instruments such as ASA and WGSA, by way of GRIP and NTSP to NISA and CFIP. Crop insurance which has been available to farmers since 1959 to provide protection against production loses also has evolved in response to the industries needs. Finally, when programs are perceived to have failed a particular group of constituents, governments have often responded with ad hoc programs to provide support to the sector.

Concurrent with the evolution of programs has been the evolution of the sector itself. Over time, it has moved from being dominated by small scale mixed farms to one which incorporating both the stereotypical smaller scale family farm to large scale, highly specialized commercial operations, finding room for much variation in between. With this evolution has come the realisation that each dollar spent in agriculture for either income support or stabilization, is not shared equally among farmers; and, that farmers in different circumstances are likely to have unique requirements.

Just as programs evolved with policy objectives and principles, so too have the funding arrangements underpinning the programs. Prior to the establishment of the "Safety Net Envelope," program funding was program driven, some funded in their entirety by federal or provincial governments, some shared by governments, and others shared by producers and governments. There did not exist a consistent approach to how funding was provided, thus over time the levels of support available to producers in different provinces became unbalanced.

In recognition of the need to find some measure of balance in assistance available to producers, and in an effort to provide some measure of stability, the concept of a 60:40 federal-provincial cost shared envelope of safety net funding was established. Federal funding was then allocated to provinces based on risk and size of the sector.

By the end of the first agreement establishing the safety net envelope, it became clear that there were concerns about equity. A number of provinces felt that the relative size of the sector should drive the allocation of federal funds. After considerable debate, an allocation formula reflecting only the size of provincial sectors was developed.

Safety Net Objectives

Although specified in the Framework Agreement of 2000 as being:

> "...to promote the management of risk and reduce its impact, including, but not limited to, income stabilization. In pursuing this objective, the parties intend:
>
> - to share with farmers the management of normal business risk through funding of programs, and promotion of private sector risk management tools and best management practices; and
>
> - to target Income Disaster Assistance Programming to those farmers facing the most severe income variation, where variation is seen as up to a three to five-year period".

There has been some concern as to whether there exists an inherent ambiguity in what governments wish to accomplish with safety nets, and therefore the instruments which are used to achieve them.

Where on one hand, ministers might have chosen to pursue multi-functional social objectives similar to those of the European Union, they may have, alternatively, pursued objectives more consistent with a purely commercial sector. In Whitehorse, ministers articulated a dual set of objectives drawing on elements of both a multi-functional social vision of the sector and a commercial vision of the sector. These objectives recognize that while there exists a commercial sector with whom governments are prepared to share risks when private sector tools are not reasonably available; there is also that component of the sector which is not well positioned to deal with neither changing market conditions nor evolving technology, and as a result requires assistance (Figure 1.1).

By articulating objectives of both renewal and risk management, ministers are allowing for the development of specific policy instruments to address the unique and divergent requirements of these different segments of the sector. Furthermore, ministers are recognizing the contribution of agriculture to the rural landscape.

Focus and Structure of Safety Net Review Discussion Document

This assessment of safety nets will take a holistic approach, recognizing that safety net tools and programs are intended to work together in some fashion. However, where possible, individual programs will be assessed against the objectives and principles articulated for that specific program (see Annexes 1-6), and for safety nets as a whole.

Additionally, analysis will attempt to identify gaps between current programming and objectives and principles, and in small measure, identify where the objectives governments hold for safety nets are not shared by producers.

This document will consist of six additional components. Chapter 2 seeks to set the context in which safety nets function, considering both the international climate and domestic situation. Chapter 3 will focus on the relationship between incomes and safety nets, considering income levels, adequacy and variability. Chapter 4 will focus on current funding arrangements, on issues raised related to these arrangements and on some options for the next Framework Agreement. An environmental assessment of safety net programs will be the focus of Chapter 5, while Chapter 6 will summarize the key analytical results and express the conclusions of the working group responsible for undertaking this assessment.

Level One

SAFETY NET OBJECTIVES

Figure 1.1

Multifunctional Social Objectives "EU Policy - US Funding"

Objective:

To maintain the rural landscape with a focus on people and families

Consequences:

- Many more farms
- Fewer incentives for farm operations to be efficient
- Risk of continued erosion of competitive position high
- Redistribution of government support to smaller scale agriculture likely
- Increased safety net expenditures to support incomes and maintain rural landscape

Whitehorse/APF Policy Direction Two-track "Social" and Commercial Objectives

Objective:

To move the sector toward a more commercial orientation while recognizing the need to provide opportunity to those not positioned to respond to market signals and technological advance, and to maintain the rural landscape

Renewal

Objective:

To provide farmers with opportunities to adapt to market realities and technological change, including options both within and outside the sector

Risk Management

Objective:

To provide tools to farmers where private instruments are not reasonably available, and to share in some of the economic risks faced by the sector

Consequences:

- Eases but does not prevent adjustments in response to market signals or technological advance
- Reduces the risks of dramatic changes to the rural landscape
- Benefits of the renewal track will tend to accrue to small scale agriculture, and help reduce human and economic costs to those unable to respond to changing conditions and may help some be re-integrated into the commercial stream
- Benefits of the risk management stream will benefit commercial agriculture
- Provides for a clearer balance of social and commercial objectives through specific programming

Commercial Objectives

Objective:

To promote a highly competitive and productive agricultural sector

Consequences:

- Many fewer farms
- Government support distributed to larger scale enterprises and their owners
- Reduced levels and likelihood of direct government support

CHAPTER 2: CONTEXT SETTING

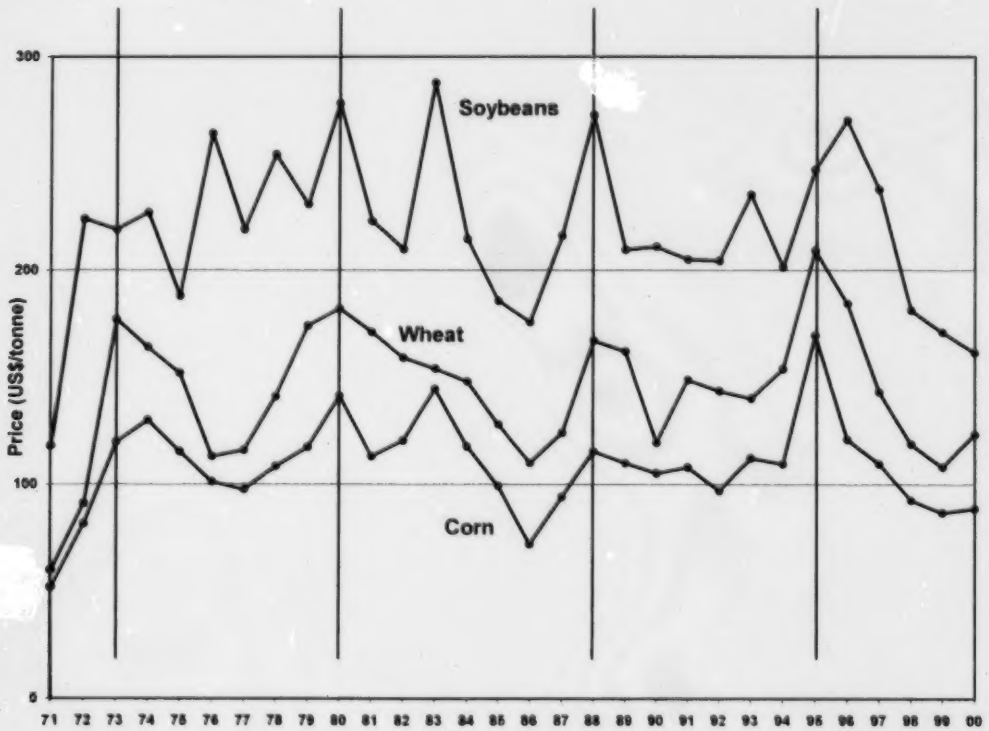
2.1 The Variability of Farm Income

Farm income is highly variable because of many factors beyond the producers' control. Prices are especially variable because world production is itself variable while demand is relatively fixed. Figure 2.1 shows prices of soybeans, wheat and corn over the period 1971–2000. Prices at the start of this period were very low but rose throughout most of the 70s buoyed by high rates of inflation. Prices at near record values in 1980 fell to 1986 reaching less than two thirds of their 1980 value.

Prices soared again in 1988 marking the beginning of a new cycle as they did again in 1996. By 2000, prices were near their 20-year low points in nominal terms. The trend to generally lower prices in constant dollar terms over this period is part of long-run effects of technical change that stretches back for centuries.

The issue of concern here though, is not the trend but the tremendous variation in prices from year to year characterised by cycles of uncertain length shown in Figure 2.1. The causes of the variation are well understood. Because the demand for food is inelastic, consumption is relatively unresponsive to price. Put another way, relatively large price movements are required to induce consumers to adjust consumption to relatively normal changes in production.

Figure 2.1: Price Trends for Soybeans, Corn and Wheat



Production is unstable because of its dependence on weather and the inherent biological uncertainties in managing crops and livestock. The lags in production cycles, the difficulty and cost of storage, and the high cost of transportation relative to product value, all combine to make production highly variable. These factors add production uncertainty to the mix for the individual producer, as well drive price variability in aggregate.

Although average prices may drive producers' decisions, their incomes are determined by the prices when they sell their crops and livestock. Price variation within the year and local effects of weather and diseases which affect crops and livestock mean that there may be tremendous variability in outcomes for individual producers. Generally, gross margins are a small share of price so farm incomes can be even more variable than prices. Producers must cope not only with the year to year variability in prices but the variability from day to day.

Successful farmers have developed a number of different ways of managing risks. Some of the strategies used are:

- *Diversification:* Farmers produce several different commodities or varieties of the same commodity. Some may have offsetting effects such as low grain prices reducing costs to livestock enterprises. There are many new opportunities for diversification from organic to GMOs and everything in between.
- *Variety selection:* Farmers can select varieties which are resistant to drought and disease. Science has expanded opportunities extending the range of crops that can be produced in what were once riskier agro-climatic zones and making crops and livestock hardier and more disease resistant.
- *Cost management:* Farmers keep sunk costs slow perhaps at the expense of output to minimise the impact of low yields.
- *Risk reduction technologies:* The most obvious risk reduction technology is irrigation but drainage and numerous livestock management practices also reduce output risks.
- *Contract production:* Farmers can sometimes lock in prices by entering into vertical contracts. More sophisticated supply chain management agreements are also beginning to appear.
- *Price pooling:* Canadian farmers frequently enter into co-operative marketing systems to reduce seasonal risk.
- *Forward pricing contracts*: Farmers can lock in the prices of many commodities on futures markets.
- *Crop insurance:* Participation in crop insurance programs reduces output risk.
- *Other safety net programs:* Participation in government safety net programs such as NISA reduces overall income risk.
- *Financial management:* Farmers manage their balance sheets knowing that they need to be able to cope with years in which income falls below average for whatever reason.

Finally, it is important to realise that not all variability is bad: well-established producers may choose to participate in enterprises with more variable returns, such as forage seed crops, because of the possibility of exceptionally high returns. Other farmer entrepreneurs achieve higher than average returns by seeking out new unproven technologies even though there may be more associated risk.

From a social point of view, the problems are most acute when cyclically low prices or phenomena such as widespread drought or flooding affect large numbers of producers in one or more provinces. In this case, the farmers' problem becomes a community problem that affects the welfare of everyone. Sharing risks with primary producers through our safety net programs has therefore become a major component of Canadian agricultural policy.

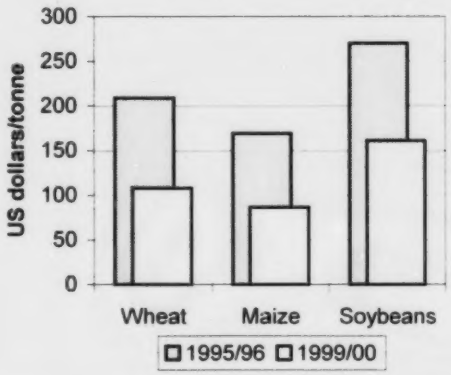
The next section of the report focuses on the impact of international factors on both the level and variability of commodity prices, especially through the last peak and trough of the grains and oilseeds price cycle between 1995 and 2001. This analysis disaggregates the cause in the fall in prices over this period into various demand and supply side factors including the level of support in the US and EU. It includes additional discussion of some of the unintended consequences of some of the support programs in both of those regions.

2.2 International Context

Reduced Demand by China, NIS Countries and the Asian Tigers

Figure 2.2 shows the decline in grain and oilseed prices between peak and trough through the last major cycle. Wheat and corn prices are down nearly 50% while soybean prices declined 40% albeit both peak and trough occur a year later for these commodities. Prices of barley and other coarse grains are closely tied to maize prices while canola prices are closely linked to soybeans.

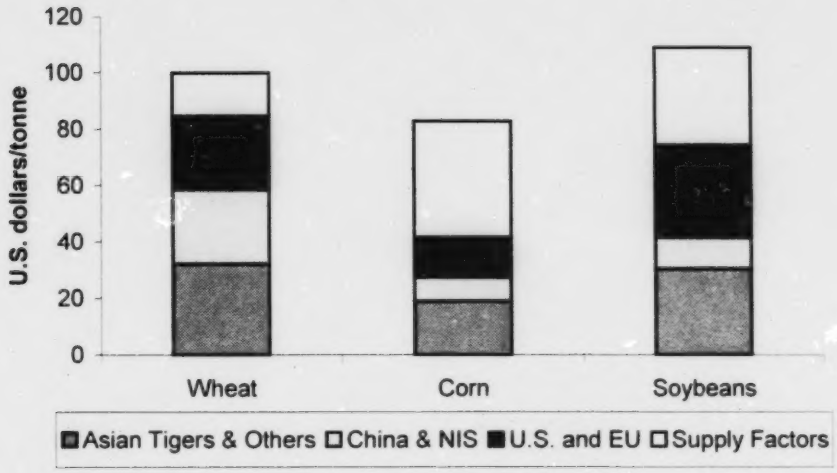
Figure 2.2: The Current Price Cycle



Several factors contributed to this large decline, not the least of which was large increase in prices leading to the peak in the mid 1990s. A driving factor in the rise in prices was the rapidly increasing demand from the "tigers" of east and southeast Asia. The financial crisis in these economies created long-term economic hardship and dislocation, reduced per capita incomes and industrial capacity, and fundamentally changed the dynamics of their demand for agri-food imports. Although these economies have certainly begun the long process of recovery, their demand for agri-food imports has not recovered to pre-crisis levels. As these economies return to pre-crisis per-capita income levels in the near future, their demand for agri-food imports will not recover. The depreciation of their exchange rates shifted rural-urban terms of trade making imported foods more expensive and increasing the competitive advantage of domestic production. As their incomes increase and their real exchange rates return to pre-crisis levels, their agricultural capacity will have several years of improvement. Their demand for agri-food imports might return to pre-crisis levels only in the very long run.

Another reason for the decline in agricultural prices is reduced demand from China and the newly independent states (NIS) of former Soviet Union. This results from more complex factors although Russian demand was certainly impacted by the financial crisis in that country. The result is similar in its long-term impact on their demand for agri-food imports.

Figure 2.3 Impact of Lower Demand



What would have happened to prices if these two components of demand had remained at the high levels they achieved in the mid 1990s? The OECD AGLINK model was used to answer this question. Figure 2.3 shows how much the peak to trough fall in prices would have been reduced without this fall in demand. The dark grey area shows the effect of the reduction in demand from the Asian tigers; the upper light grey area shows the effect of the reduction of demand from the NIS and China.

The greatest impact is on wheat prices which would have been US$58/tonne higher. The prices of corn and soybeans would have been US$27 and US$41 per tonne higher, respectively. This suggests that an important component price change of these commodities was caused by a long-term shift in demand and that there needs to be a corresponding reduction in production in the grain and oilseed exporting countries. Efforts to bridge this fall in demand with government support only delays the need for adjustment but the high levels of US/EU support force even greater adjustments on other countries.

Another reason often mentioned for current low prices is the high level of support given grains and oilseeds especially by the two largest producing and consuming regions-the US and the EU. Before reporting on estimates of the impact of these policies on commodity prices, the next two sections summarises both the volume and the structure of support for agriculture together with a description of some of the considerations that have influenced the policies adopted.

Support in Canada, the US and EU: Part 1

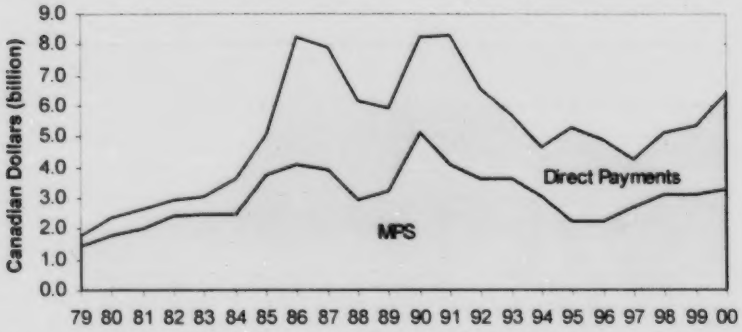
In the 1980s, support for agriculture in Canada and our major trading partners, the US and EU, was especially concentrated in market price support (MPS) as illustrated in Figure 2.4.[1] MPS includes government regulations which affect market prices. For importing countries, these are tariffs and import restrictions which may or may not be linked to production quotas. The effect of this type of policies is to raise domestic prices effecting a transfer from consumers to producers. Exporting countries need to offer export subsidies, which results in a transfer from both domestic consumers and the government. The alternative to MPS is the various forms of direct payments made to producers by governments. (Government expenditures for research, inspection, extension and other similar programs are not included in Figure 2.4.)

Support in all three regions increased dramatically in the mid 80s, first in the US but soon after in both Canada and the EU. American support was substantially below the mid 80s peak throughout the period 1988–97 though market price support levels remained high. The rapid increase in American support since 1997 has been dominated by increases in direct payments.

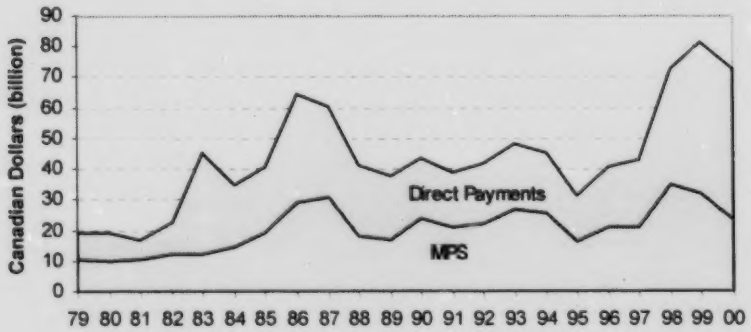
[1] Although the scales in Figure 2.4 are different they are comparable. Agricultural sector sales to other sectors in 2000, were roughly in the ratios 1:10:10 for Canada, the US and EU, respectively.

Figure 2.4: Structure of Total Producer Support, 1979–2000

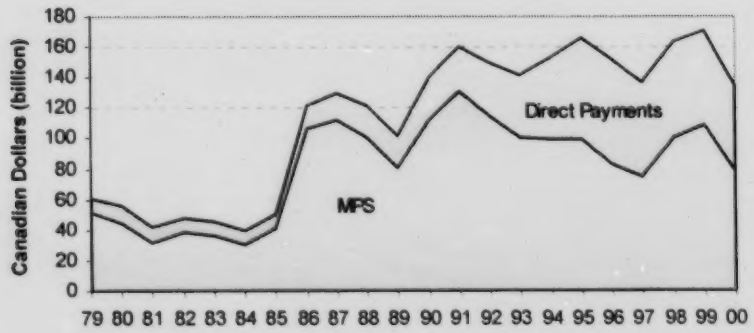
Canada



United States



European Union



The abrupt rise in EU support in 1985/86 support is almost equally attributable to an increase in current expenditures in European currencies and a fall in the value of those currencies against both the Canadian and American dollars. EU support levels, after falling in 1989, continued at very high levels throughout the 1990s though there has been a change in composition with MPS declining and an increasing share of support coming in the form of direct payments.

Canadian support evident in Figure 2.4 reveals more reliance on MPS than the US but considerably less than the EU. Our overall support levels were slightly higher than American support, relative to the size of our sector through most of the period 1988–97 but this means our support rates have been roughly half those in the EU. The rapid increase in US support after 1997 has been only partially matched by increases in Canada and the EU.

Program Impacts on Output and Farm Income

Recent OECD analysis of different types of support in Canada, the US, the EU and three other OECD countries dramatically demonstrates a trade-off: programs can increase farm income programs or they can provide incentives which can result in increased production. Programs which result in increased production are likely to be classified as coupled in the jargon of agricultural policy. The prototype of a coupled program may be the output subsidy which has the same sort of effect as an increase in price caused by a shift in demand. Farmers respond by increasing production, perhaps through more using intensive production technology, perhaps through increasing land used to produce the subsidised commodity. This increases the costs of production, per unit of output as well as total costs. Increased production may result in lower market prices which partially offset the effects of the subsidy. Most of the subsidy may be eroded thorough higher production costs and lower prices.

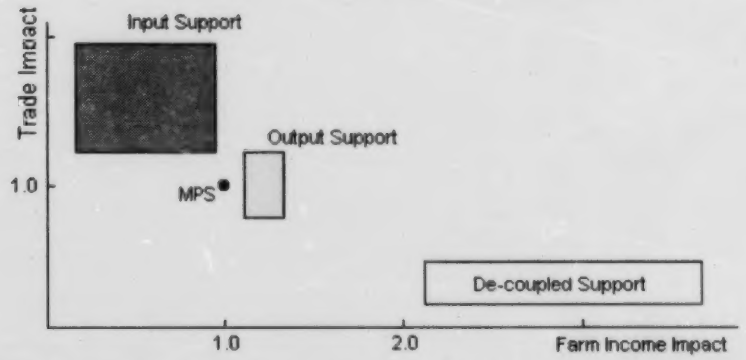
In the OECD analysis, the effect of a fixed amount of support was evaluated according to the form of that support:

- market price support such as tariffs or export subsidies,
- output support such as GRIP or the USDA Loan Deficiency Payments (LDP),
- input subsidies or rebates, or
- relatively more de-coupled payments such as the US Production Flexibility Contracts.

The first three of these are the traditional type of programs that were the core of government support for agriculture in OECD countries in the 1980s.

Impacts are reported relative to the impact of MPS programs. Figure 2.5 shows their results schematically. In summary, there is not much difference in the impact on trade and farm income between MPS and output subsidies. Farm input subsidies consistently increase output more and farm incomes less than MPS, while de-coupled programs have a larger impact on farm income and a relatively small impact on trade.

Figure 2.5: Program Trade-offs



A major focus of most developed countries in the 1990s was to restructure their agricultural support programs to make them more trade neutral. This shift results from a determination to contain support for agriculture making it more effective and consistent with the WTO Agreement on Agriculture. The reduction in MPS in both Canada and the EU reflects this determination. American results in the 1990s have been partially offset by the appreciation of their dollar.

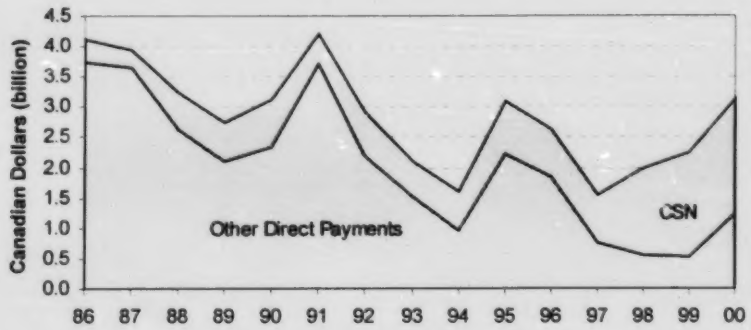
Support in Canada, the US and EU: Part 2

The three regions have all refocused their direct support programs but taken quite different approaches to WTO disciplines. Figure 2.6 shows the changes that have been made. Canada has reduced direct support overall and redirected it into safety net programs. Our objective has been to satisfy our WTO commitments by limiting support and directing it to programs which reduce the variability of farm income: our current safety net (CSN) programs highlighted in Figure 2.6 are crop insurance, NISA and AIDA/CFIP.

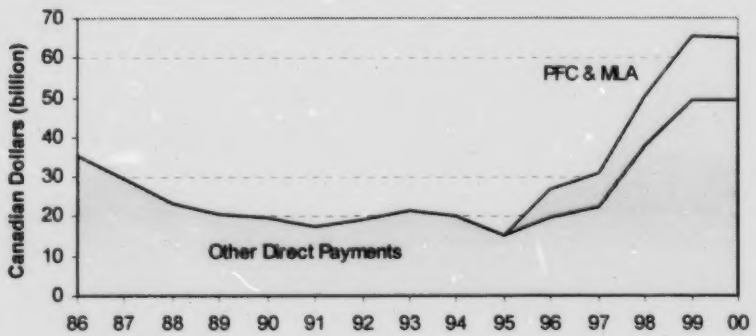
The 1996 US FAIR Act introduced a new program, Production Flexibility Contracts (PFCs), based upon production of cotton and six grains crops in 1991–95. Payments are made to landowners contingent on the land being used for farming but otherwise independent of current production so the U.S. designates them "green" at the WTO. Although designated green, even PFC payments are not completely de-coupled. Though far more trade neutral than other direct payment programs, there several ways in which PFCs promote increased production. Producers must continue to use the land for agriculture. At worse, if there are not satisfactory alternative uses that maintain PFC eligibility, PFCs may not be very different from output subsidies. Insurance effects, capital market effects and farming to maintain eligibility for payments in future Farm Bills have all been suggested as PFC incentives to current production.

Figure 2.6: Structure of Direct Payments, 1986–2000

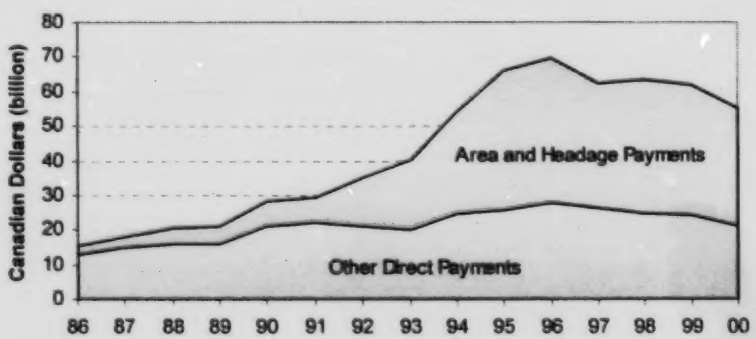
Canada



USA



EU



Under the 1996 US FAIR Act, support to grains and oilseeds is provided through a number of policy instruments, including LDP, Marketing Loan Gains (MLG) and PFC Payments. The Conservation Reserve Program (CRP) is the main conservation program. Input subsidy programs involve a number of small programs, for example, agricultural credit, and energy and irrigation subsidies. Milk and dairy products are supported by minimum prices and government purchases of dairy products, as well as by tariffs, tariff-rate quotas and export subsidies.

Congress reacted to lower grain and oilseeds prices by supplementing producer incomes with Market Loss Assistance (MLA) payments and other smaller programs since 1998. The PFC top-ups or Market Loss Assistance (MLA) is not described as green in the American WTO submission. By 2000, direct government payments to producers were at record levels. As a result, the U.S. percentage PSE for grains and oilseeds increased from 14% in 1997 to 27% in 1998 and to 34 and 33% in 1999 and 2000, respectively. The U.S. level of support for grains and oilseeds is now much higher than Canada (see Figure 2.7).

The EU introduced "compensatory payments" as part of the MacSharry reform, in 1992. One of the aims was to reduce the domestic price of cereals, increasing EU consumption and reducing export subsidies, and imports of cereal substitutes. Direct payments to producers replaced some of the market price support for many arable crops, beef and sheepmeat, effective with the 1993/94 marketing year. (The market price support component of support was reduced but not eliminated.) The reduction of regulated domestic prices allowed reductions of tariffs and export subsidies. The decision effectively allowed the EU in 1995 to meet its Uruguay Round commitments.

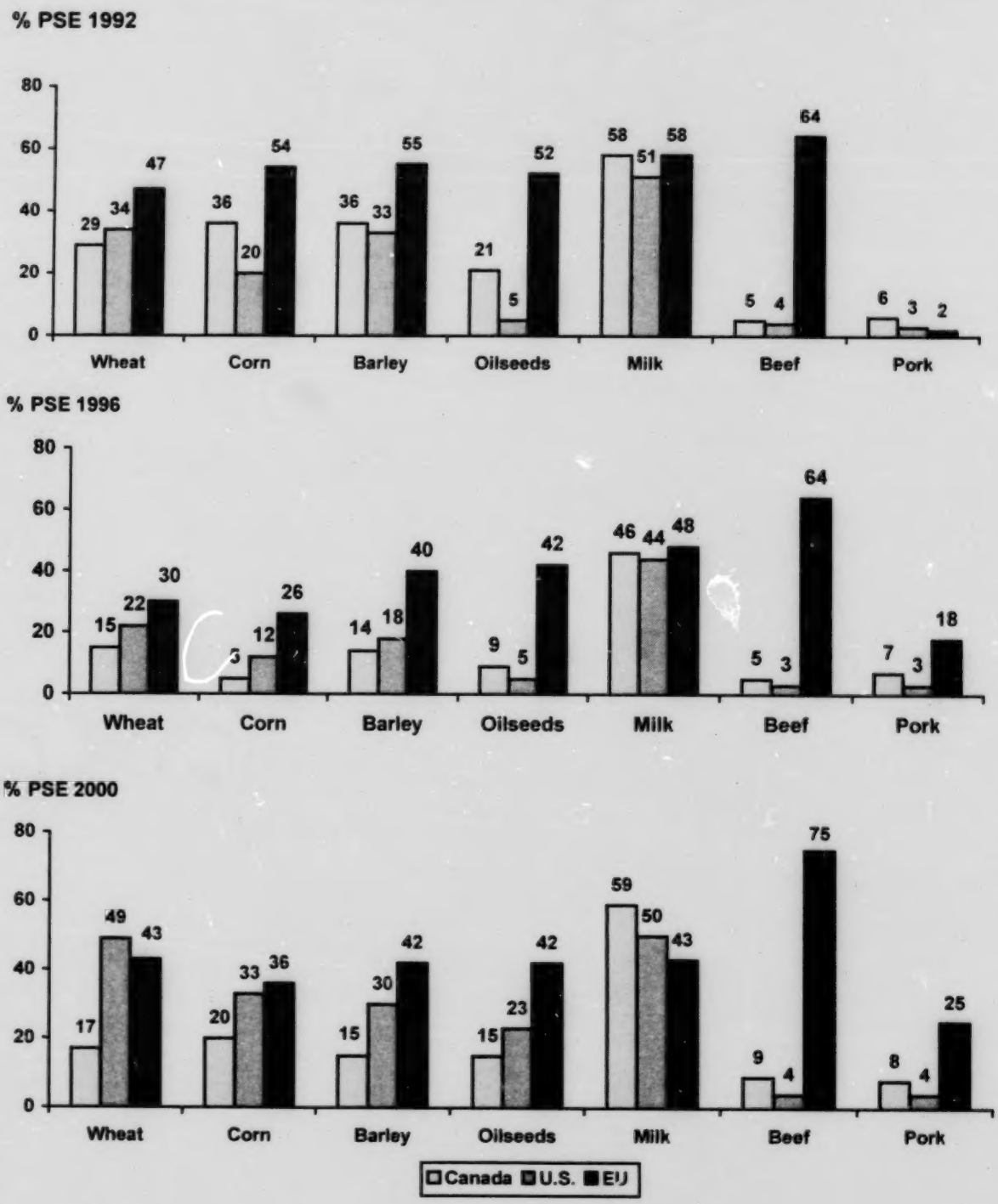
Domestic prices were reduced over a three-year period from 1993/94, with compensatory payments rising correspondingly or, in some cases, by significantly more than would have been required to compensate for the decline in prices. Further reductions of domestic prices for cereals and the eventual elimination of the intervention for beef with increases in compensatory payments were announced in 1999.

Direct support is paid in the form of area payments for cereals, oilseeds, and protein crops (peas, beans, sweet lupins), and headage payments for beef and sheepmeat. Area payments are based on historic, regional yields and are paid on condition that producers set aside a defined percentage of their arable land. Durum wheat receives a special per hectare payment in addition to the compensatory payment.

The basic compulsory set-aside rate for the whole period 2000–06 is 10 percent of each producer's arable land. Production is reduced by less than 10 percent because of exemptions[2] from the set-aside requirement and because producers are able to set aside their less productive land. The size of the area payments for cereals, oilseeds and protein crops differs but differences have been reduced considerably and will be eliminated by 2002/03 for all arable crops (cereals, oilseeds, protein crops, and set-aside).

[2] Crops grown for industrial use and by small–scale producers (with less than 92 tonnes, corresponding to about 20 hectares) are exempt from the set–aside requirement.

Figure 2.7: OECD Producer Support Estimates as a Percent of Adjusted Market Returns



Beef is supported, *inter alia*, through headage payments based on fixed, reference livestock numbers subject to limits on livestock density (basic special premium for male animals, suckler cow premium, premium for bulls, and slaughter premium). Similar types of payment support apply to sheepmeat and goatmeat.

In summary, although EU and US support levels have not decreased as much as we would have hoped, they have become somewhat less distortionary. Changes in the amounts and structure of agricultural support have raised new issues. The Europeans are increasingly concerned with addressing broader social objectives through their agricultural support policy. They have argued that there should be some recognition that payments that target these objectives should be treated differently but have not said how the effects of these types of payments should be disentangled from their trade impacts.

The US too had set-aside provisions for many years but explicitly rejected this approach in the "freedom to farm" principle incorporated in the 1996 Farm Bill. However, the problem of program capitalisation has always been an issue in the US but it has become increasingly important because of the high share of farm income coming from support and probably because of the increased share of support that is more de-coupled. The problem of capitalisation is discussed in the next section

Historical Entitlements and the Capitalisation Issue

There is increasing awareness however that more de-coupled programs have other consequences which reduces their attractiveness:

- Programs benefits are capitalised into the principle asset, agricultural land, which entitles farmers to the support.
- They quickly become out of phase with the need to provide support for farmers whose income is cyclically reduced by market forces or other events beyond their control.

Economists have always maintained that land value is directly linked to the income that can be earned from land though many other factors which are also known to influence the relationship. Empirical studies have not lead to a simple rule-of-thumb between program payments and land values both because of these other factors and because the degree of de-coupling depends on the program mix and the details of program conditionality.

The affects extend beyond the small share of farmers who may be buying or selling land in a particular year because land rental rates can adjust very quickly. According to the 1996 Census of Agriculture, about 40% of Canadian farmland is rented. While many farmers are major land owners and would therefore benefit from capitalization, those renting or wanting to expand their farms may actually be penalized by the subsidies. Investment is diverted away from productive assets into bidding up land values. The problem of intergenerational transfer is exacerbated. The subsidies end up disproportionately benefiting currently well established and retiring farmers at the expense of the next generation. Capitalisation can affect also costs of production in other ways too.

Box 1: The Dilemma of Increased Support and Land Values

" ... the common root of many of the farming sector's current problems: cash flow difficulties; large increases in debt; trouble of beginning farmers; the attraction of farm real estate for persons of large wealth or high income—all of these stem from the fact that, at such growth rate, a significant proportion of the total return to farm real estate necessarily takes the form of real capital gains ...

In attempting to respond to cash flow problems and the like, it might appear logical to take policy actions that increase the growth rate of current return. However, the principal longer-term effect of programs that maintain or increase the growth rate is not on the profitability of farming, but rather on the degree to which profit takes the form of capital gains rather than current return. Policy actions that increase the growth rate will tend to depress the rate of current return to assets, and thus the problems they seek to address are eventually aggravated ...

A low current return to the market value of assets is not a problem for all farmers. Established farmers, like wealthy stockholders, thrive on the growing and eventually high rates of return on funds invested in earlier years. But persons of limited means find it difficult to undertake investments with low initial current return—or may find themselves in financial difficulty shortly after doing so ... "

[American Journal of Agricultural Economics 62 (Dec. 1979), p. 1091]

In the short term, higher agricultural returns may induce higher prices in all inputs but the prices of assets such as machinery and equipment and breeding herds may sustain those increases in the medium and long term. The potential for capitalisation, therefore, has important implications for program design which has been understood for a long time. Melichar described the dilemma for policy makers over 20 years ago (see Box 1).

An increase in program support that results in higher land prices contributes to endemic problems in the sector. Three of these are:

- the difficulties beginning farmers or expanding farms have with cash flow,
- increases in debt and associated financial vulnerability, and
- the attraction of farm real estate to wealthy or high-income non-farmers.

In attempting to respond to financial problems in the sector, the most obvious policy action is to increase support. When these increased incomes become capitalised into higher land values, they become part of the cost structure and the overall rate of return remains low leading to a new round of demands for still greater support. The principal longer-term effect of such programs is not on the profitability of farming, but rather on the degree to which profit takes the form of capital gains.

Subsidies become part of the cost structure in other ways as well. Farmers also bid up the prices of all inputs in the short run and the price increases for assets such as machinery and breeding animals may be sustained. New investments are made in sustaining or increasing productive capacity in enterprises that are only competitive because of the level of support. De-coupled programs such as those introduced under the American FAIR Act, to the extent that they are successful in separating support from current production, aggravate the problem of capitalisation. The recent surge in interest in the capitalisation issue in the US particularly in ERS publications is further evidence that FAIR Act programs were indeed more de-coupled than the array of support. A recent USDA report summarises their findings on the relationship between government support and land values (see Box 2.) New farmers and farmers which are in the expansion phase of their business cycle are in particularly vulnerable position: they don't really benefit from the programs themselves because the future payments are monetised in the form of higher land prices. If the programs are discontinued, the big losers are this vulnerable group rather than the previous landowners.[3]

The revival of American support for the traditional programs illustrates the other main problem with historical entitlements. They soon become a very poor vehicle for supporting farmers who need assistance. As the structure of farm ownership and production evolves over time and over the lifecycles of individual producers, there is a growing gap between who is doing the farming and who is receiving support. The gap is exacerbated as the need for support changes from region to region and from commodity to commodity. The US has responded with MLA payments which are made upon the same basis as PFC payments but which are no longer WTO green since they are a reaction to lower prices. There has been a demand to re-specify the base to align it with recent production. Finally, it is clear that historical entitlements have not replaced traditional direct payments. These have ballooned since 1997 exacerbating both the capitalisation issue and contributed to lower prices on world markets.

Box 2: Empirical Results of Capitalisation of Programs in the US

"Most previous studies ... bracket the effect of government payments between 7 percent and 38 percent of cropland value."

A 1990 study by USDA's Economic Research Service ... [found that] cropland values would be 15–20 percent lower in the absence of government payments."

"[M]ore recent ERS results indicate that the responsiveness ... varies widely ... for example, elimination of government payments would have lowered land values by 69 percent in parts of the Northern Plains, and by about 30 percent throughout much of the Corn Belt."

"[In] the absence of government payments, total value of U.S. farmland would have been about 4 percent lower at most during 1972–81 and no more than 19 percent lower during 1982–89. This gap between total U.S. land value with and without government payments decreased to about 13 percent during 1990–97, and rose to 25 percent during 1998–2001."

["Government Payments to Farmers Contribute to Rising Land Values", USDA Agriculture Outlook June–July 2001]

[3] This has been described as the "transitional gains trap."

Capitalisation, therefore, is a potential side effect of support programs that needs to be avoided as much as possible in program design. But this is not the only significance of capitalisation for Canada. It also explains why reducing support in the US and EU might not benefit Canadian producers by as much as might be expected: the effect of reduced support in these countries would be divided between lower land prices as well as reduced production.

Issues with Area and Headage Payments

Area payments are based on a fixed Euro value multiplied by a fixed historic regional yield. The fixed per hectare payment effectively de-couples the payment from yield. A producer cannot affect the size of his payment by changing yields and therefore has no incentive to expand yields beyond what market conditions would dictate. However, the choice of crops is still influenced by the payments. Even equal payments across all crops affects the choice of crops, since the variable cost of each crop (and set-aside) is different.

EU payments depend on the producer actually producing a crop on the area not set aside. It is possible that EU production would decline if production were not required. However, this holds only if the next best alternative use of the land is non-agricultural or fallow. If the next best alternative is crop production, an efficient producer might even be able to bid land away from inefficient producers and production on that land would increase.

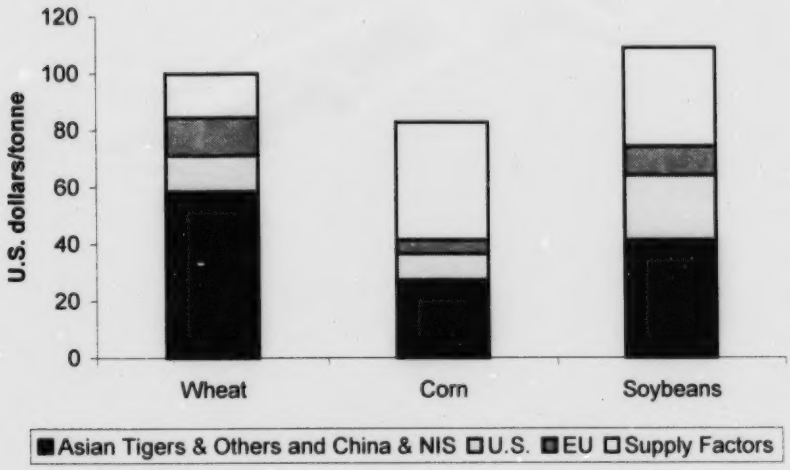
While the EU area payments do not seem to induce extra yields, this neutrality depends on the producer not being able to affect the size of his current payment. If the producer anticipates that future extensions of the program will depend on his current behaviour, extra yields may be induced.

Overall, the EU move towards area and headage payments is a positive step in that it replaces some of the price support provided to arable crops and certain meats. The area payments, operating in conjunction with set-aside requirements, distort production less than the same amount of support provided in the form of market price support. While the area payments are expected to have only small, if any, direct yield-increasing effects, they do keep more land in production than otherwise would be the case. The effects in terms of increasing producers' cash flow and wealth can facilitate yield-increasing or cost-reducing on-farm investments. Moreover, the payments provide a stable ongoing revenue stream, which increases liquidity and facilitates the choice to produce higher-risk crops.

The Impact of American and European Support

What would have happened to prices if government support had been drastically lower in the US and EU. Again the height of the bars represents the entire fall in prices from their peak in 1995 or 1996 to the low levels of 1999 or 2000. (The two crossed-hatched sections still show the effect of the decline in demand from the NIS, China and Asian tigers described above.) The OECD AGLINK model was used to predict the consequences.

Figure 2.8 Impact of Lower Support



The effect of eliminating LDP, PFC and MLA payments in the US is shown by the light grey section of the bars in Figure 2.8. The effect of eliminating all direct payments in the EU is shown by the upper dark grey section. The greatest impact of both of these combined is on soybean prices which would have beenUS$33/tonne higher. The prices of wheat and corn would be US$26 and US$14 per tonne higher, respectively. The unshaded area in each bar shows the effects of all other factors, including the long-term trends.

This is a significant impact. These price gaps are 13–18% of the average prices over the period 1981–2000 which is commensurate with typical gross margins for these commodities. Reducing this support would, therefore, make a major impact benefiting our producers. While foreign subsidies are an important factor determining current prices, they are only a part of the entire picture. To see this picture, current market conditions need to be evaluated in terms of long-term trends. This, together with a brief assessment of the factors which might affect these trends, is the subject of the next section.

Long Term Trends

Figure 2.9 shows the wheat prices we have been discussing after adjusting for inflation so that all prices are expressed in 2001 US dollars per tonne. Because of cumulative effects of inflation, prices in 2001 dollars are higher than they were in current dollars—with the largest increases for the earliest prices in the series. The dashed line shows a simple exponential trend fit through the data. The large trough and peak at the beginning of this series covers a period of extremely low prices followed by the rapid increase in prices when the USSR reversed a long-standing policy and began managing production shortfalls by imports rather than reduced consumption. Prices in the mid 1990s appear as a bulge distinctly above trend. In 1998–2000, prices are below trend but differ from trend by an average of $20 per tonne for these three years.

Since the prices of corn and soybeans move closely with wheat in the long term, it is not surprising that corn and soybeans show very similar results. The average gaps between trend and actual prices in 1998–2000 for corn and soybeans are $8 and $16 per tonne, respectively.

Figures 2.9 describe the decline in crop prices over the last three decades which is itself a continuation of a trend which goes back centuries. The trend is the result of a number of factors but primarily the sustained increase of productivity which has consistently outstripped the growth of demand. Demand growth is tied closely to growth in population since demand per capita increases much less rapidly than income. The result over the last two centuries has been all the more remarkable in that it has been achieved while population was rapidly increasing.

There have been suggestions in the past that this trend is reversing or will soon do so. There have been predictions at various times that demand from the NIS, China or the developing countries would result in a sustained period of rising food prices. All of these predictions have so far proved false. Population growth now appears to be slowing in most developing countries. New technology has enabled these regions to be self-sufficient or nearly self-sufficient in food even as real prices declined.

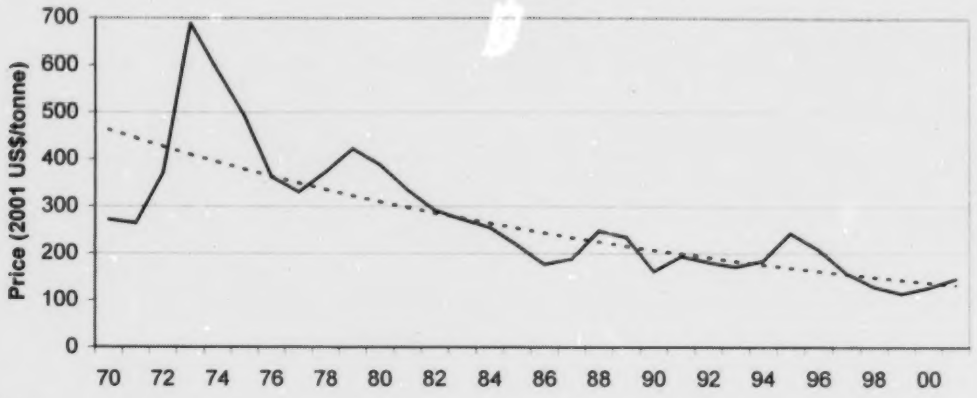
Two of the factors which could shift this trend, at least for a period such as the 70s when prices were above trend, are the following:

- If land is allowed to be used for carbon sinks, it will result in conversion of cropland into pasture and even woodland which will reduce cereal and oilseed production and raise prices.

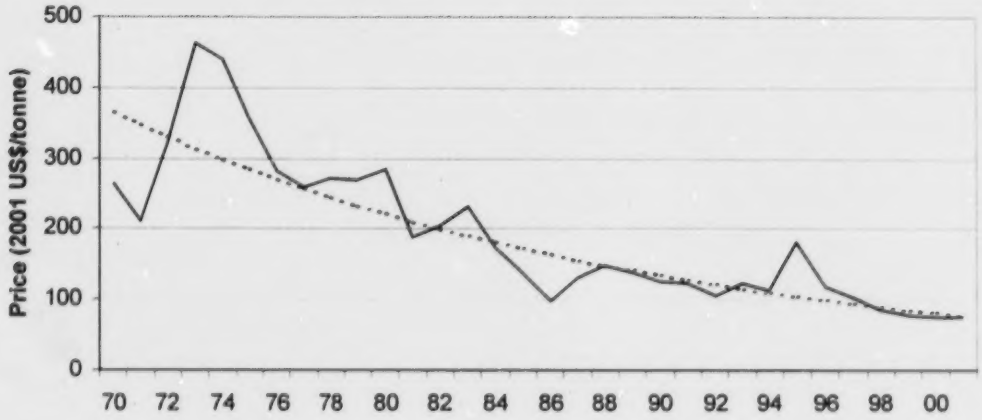
- Higher oil prices and government regulation might result in far greater reliance on ethanol fuels for transportation. This would result in increased competition for land currently used for grain and oilseed production, raising crop prices.

Figure 2.9: Inflation Adjusted Prices, Actual versus Trend, 1970-2000

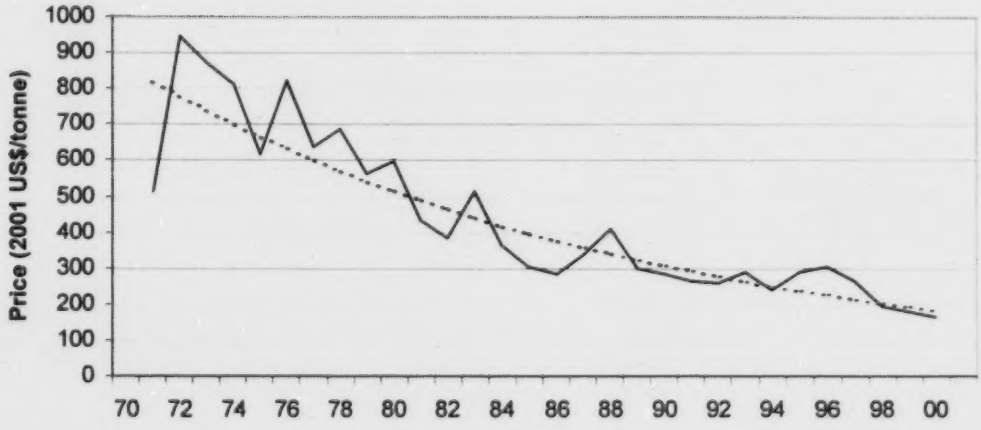
Wheat



Corn



Soybeans



There are a number of factors which may now reduce prices below trend for a sustained period. Four of these are:

- Argentina and Brazil have deregulated port charges which has significantly reduced the margin between f.o.b. and farm-gate prices and increased the amount of land used for grains and oilseeds. This is expected to result in a significant increase in grain and oilseed exports from these two major producers.

- The devaluation of the rupee and ringgit has increased the competitiveness of oil palm from Malaysia and Indonesia and resulted in an expansion in oil palm plantations.

- Australian producers have increased production of grains and oilseeds and beef in place of sheep in response to relative price changes.

- While GMO technology offers the possibility of new agricultural products serving an industrial demand, it is even more likely to lead to more rapid technical change for traditional crops and lower prices.

In short, the balance of these various forces in the commodity markets is likely to result in continued downward pressure on prices. Our policy, therefore, needs to be flexible in adapting to either situation recognising that the contingent liability of relying on an erroneous prediction could be enormous.

2.3 Domestic Context

This section focuses on the current situation facing Canadian producers given the impact of these international factors on farm income. Farms tend to rely on government programs to stabilize their farm income because of the many factors beyond the producer's control. Each sector tends to manage risks differently; some are more dependent on government programs while others prefer to rely more heavily on private risk management tools.

In 1999, there was an estimated 260,000 farms in Canada:

- 34% were "hobby" farms with total operating revenues under $10,000
- 35% were small and medium-sized farms earning between $10,000 and $100,000 in total operating revenues
- 31% were large farms earning total operating revenues of $100,000 and over

Hobby farms accounted for only 1% of production and received only 1% of program payments.[4] Generally, operators of hobby farms earn full-time off-farm employment income and are not reliant on program payments. For the purpose of this analysis, only farms with average total operating revenues of $10,000 and over will be examined in the rest of this section.

[4] Production is equivalent to total operating revenues less program payments.

Sectoral Characteristics

The majority of farms in Canada are specialized in the production of either grains and oilseeds, or cattle. In 1999, these two farm types accounted for almost 70% of farms in Canada with average total operating revenues of $100,000 and over (Figure 2.10).[5]

Figure 2.10 Distribution of Farms by Farm Type, 1999

	# of farms *	% of total
Grain and Oilseed	66,558	38.9%
Cattle	48,729	28.5%
Dairy	19,460	11.4%
Horticulture	10,630	6.2%
Hog	5,098	2.9%
Poultry and Egg	3,379	2.0%
Other Farm Types [1]	17,238	10.1%

Source: Statistics Canada, Farm Financial Survey

* Does not include hobby farms with revenues of under $10,000.

[1] Other farm types include tobacco farms, livestock combination farms and farms not specialized in any of the major products.

The overall number of farms in Canada has remained relatively steady since 1990, though this trend is not evident for every farm type. The fruit and vegetable, greenhouse and nursery, and cattle sectors increased in number over this period. Dairy farms and hog farms declined in these two sectors due to restructuring which has resulted in fewer but larger farms.

Three farm types account for two-thirds of total agricultural production in Canada—grain and oilseed farms, cattle farms and dairy farms (Figure 2.11).

In 1999, grain and oilseed farms accounted for 40% of Canadian farms, contributed about 30% to total agricultural production and received 42% of all program payments. Program payments tend to be relatively more important to grain and oilseed farms than to most other farm types because of the availability of crop insurance. Expanding global stocks of wheat, barley and corn led to downward pressure on prices causing net income incomes for grain and oilseed farms to decline in the later part of the 1990s. It should be noted that program payments in this section do not include NISA withdrawals.

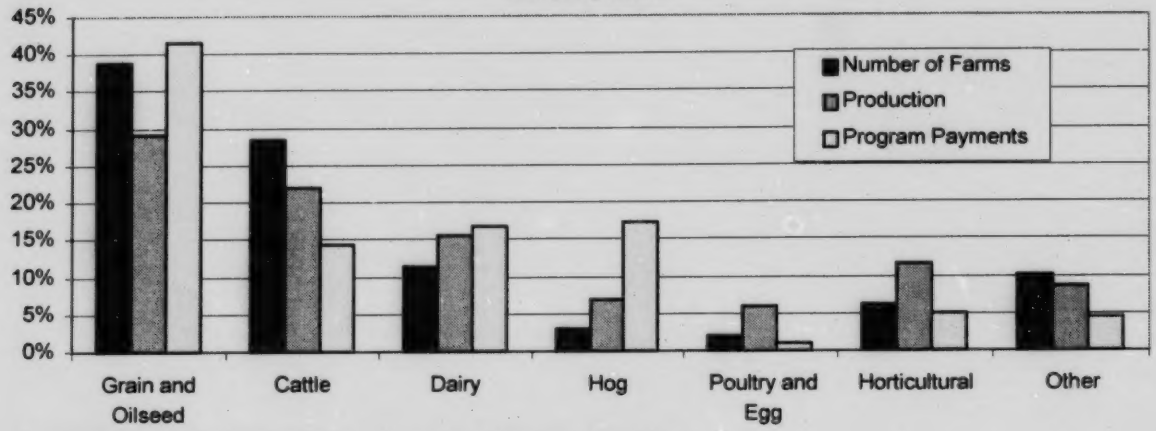
Cattle farms accounted for over one-quarter of farms in Canada and were responsible for about 22% of agriculture production, collecting about 15% of program payments. With the high concentration of very small cattle farms (total operating revenues of $10,000 to $24,999), average net operating income for cattle farms is always very low.

Canadian dairy farms captured 16% of total market receipts and received 17% of Canadian program payments. The dairy sector is sheltered to a large degree from international market pressures.

Production has become increasingly concentrated on larger farms particularly farms with revenues of $500,000 and over. For most farm types, production is concentrated on very large farms, in particular greenhouse and nursery farms, potato farms and poultry and egg farms. However, there are exceptions. Production on grain and oilseed farms and dairy farms is more concentrated on farms with total operating revenues of $10,000 to $499,999.

[5] To classify a farm by farm type, 51% or more of its agricultural sales must come from one of the major commodities or commodity groupings.

Figure 2.11 Concentration of Farms, Production and Program Payments, Canada, 1999



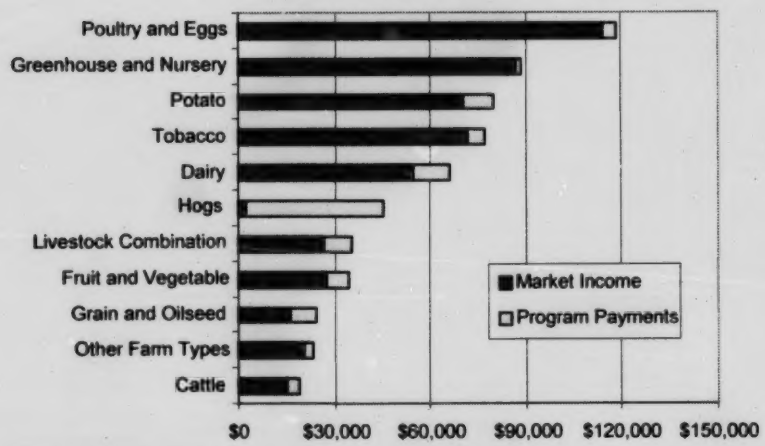
* Production equals total operating revenues less program payments

Source: Statistics Canada, Farm Financial Survey. 1999

The reduction in demand for swine/pork from Asia, caused world prices to drop substantially in late 1998 and 1999. As a result, the average net operating income for hog farms declined significantly in both these years. Government payments helped the hog sector through this difficult period. Although hog farms represented only 3% of Canadian farms, they contributed 7% to total production and received over 17% of total program payments. Over 80% of hog farms are large and most are located in Ontario and Quebec.

Average net operating incomes tend to be highest for poultry and egg farms, greenhouse and nursery farms and potato farms (Figure 2.12). Poultry and egg farms make up only 2% of Canadian farms and contribute about 6% to total production. Just 1% of total program payments goes to these farms. Almost all (89%) poultry and egg farms are large with revenues of $100,000 and over. Large poultry and egg farms exist in all parts of Canada with most in Ontario and Quebec, and some in the Atlantic and Prairie provinces.

Figure 2.12 Average Net Operating Income by by Farm Type, 1999



* Net operating income equals market income plus program payments

Source: Statistics Canada, Farm Financial Survey, 1999

Canada's greenhouse and nursery sector has shown dramatic growth in all provinces. Flowers and plants make up the greatest share of greenhouse products but vegetables are becoming increasingly popular. Tomatoes, cucumbers, peppers and lettuce are the key vegetables produced in Canada's greenhouses. In terms of net operating income, greenhouse and nursery establishments rank

in the top three among all farm types, once again due to the fact that most of these operations are large. Ontario, British Columbia, Quebec and Alberta have the largest greenhouse and nursery populations but Ontario continues to dominate the production in Canada. Greenhouse and nursery farms make up less than 2% of farms but account for almost 5% of total production. They collect just under 5% of all program payments.

Most potato farms fall into the large category and as a result they also claim one of the highest average net operating incomes in Canada. These farms however, make up only 1% of Canadian farms and contribute 2.4% to total production. Prince Edward Island has long been the main producer of potatoes in Canada but potato farming is increasing in other provinces such as Manitoba and New Brunswick. Over 45% of all potato farms are located in the Atlantic Provinces.

Approximately 9% of all farms don't fall into the traditional categories hence are grouped into "other farm types". Included are such things as other livestock and associated products such as horses, sheep goats, bees, etc. As well, other crops such as maple syrup, mushrooms, forest crops, etc. are included. These "other farm types" account for about 9% of all farms and contribute almost 7% to total production. The majority of these farms are small with most having revenues under $50,000.

Regional Characteristics

Most farms are located in Saskatchewan (24% of total), Alberta and Ontario (22% each) (Figure 2.13). Although Saskatchewan had the largest number of farms, Ontario and Alberta contribute more to the sector's total agricultural production (Figure 2.14).

Saskatchewan and Alberta have the highest share of production grouped around one or two farm types (Table 2.1). In 1999, grain and oilseed farms in Saskatchewan made up 73% of farms and produced 73% of total agricultural production in the province. In Alberta, production is grouped around cattle farms and grain and oilseed farms. Cattle farms made up 48% of farms in Alberta and produced 46% of production. Grain and oilseed farms represented 36% of farms in Alberta and contributed to one-third of total provincial production.

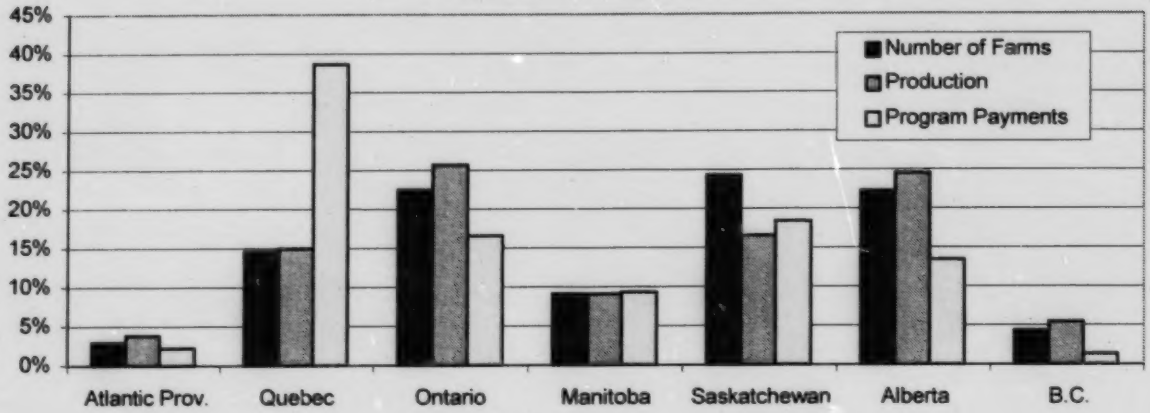
Figure 2.13 Distribution of Farms by Province, 1999

	# of farms *	% of total
Saskatchewan	41,589	24.3%
Ontario	38,393	22.4%
Alberta	38,092	22.3%
Quebec	24,898	14.6%
Manitoba	15,608	9.1%
British Columbia	7,461	4.4%
Atlantic Provinces	5,053	2.9%

Source: Statistics Canada, Farm Financial Survey

* Does not include hobby farms with revenues of under $10,000.

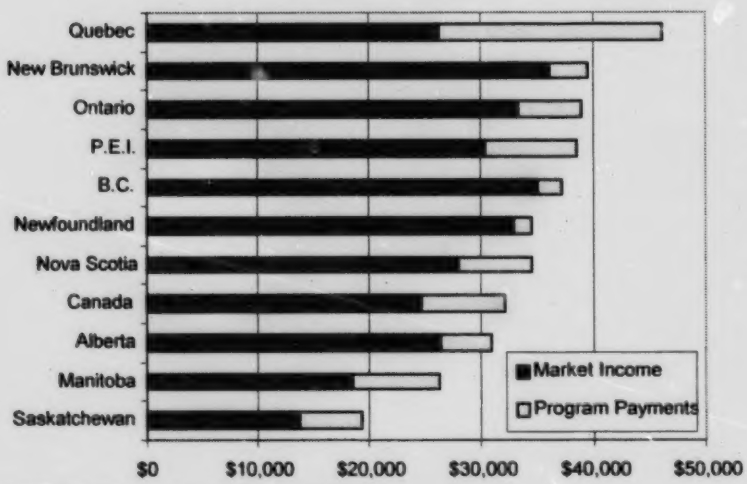
Figure 2.14 Concentration of Farms, Production and Program Payments, by Province, 1999



* Production equals total operating revenues less program payments
Source: Statistics Canada, Farm Financial Survey, 1999

Dairy farming is an important agricultural sector in Canada, ranking first in total agricultural sales in Quebec, Ontario, Newfoundland, Nova Scotia and New Brunswick and ranking second in British Columbia and P.E.I. Most of the dairy farms in Canada are in Quebec (49%) and Ontario (34%). Almost 90% of dairy farms were considered large with revenues of $100,000 and over. The average net operating income for large dairy farms is $73,000.

Figure 2.15 Average Net Operating Income by Province, 1999



* Net operating income equals market income plus program
Source: Statistics Canada, Farm Financial Survey, 1999

Prince Edward Island and Quebec stand out as having the highest proportions of large farms. This is due to the high concentration of large dairy farms in Quebec and large potato farms in Prince Edward Island. Quebec farms collect over 38% of total program payments, the highest level among provinces. Quebec offers provincial programs for agricultural commodities not covered by NISA in the province, and these contribute to the higher program payments.

Table 2.1 Distribution of Farms by Farm Type and Province, 1999

	Dairy	Cattle	Hogs	Poultry and Eggs	Potato	Fruit and Vegetable	Greenhouse and Nursery	Grain and Oilseed	Other	All Farms
Newfoundland	40	-	-	-	-	65	40	-	75	230
P.E.I.	300	330	90	-	410	85	25	50	130	1375
Nova	365	430	70	75	-	410	60	-	225	1950
New Brunswick	310	330	50	45	225	170	75	30	185	1500
Quebec	9570	4360	1425	695	350	1315	730	3020	3005	24900
Ontario	6530	9265	1890	1175	135	2140	1005	11195	5105	38395
Manitoba	670	4500	655	150	145	170	35	8110	975	15610
Saskatchewan	400	9020	245	60	-	75	35	30180	480	41590
Alberta	640	18380	620	665	130	55	420	13640	1855	38095
B.C.	640	2110	50	480	45	1650	600	315	1195	7460
Canada	19460	48730	5100	3380	1470	6135	3020	66560	13230	171095

	Dairy	Cattle	Hogs	Poultry and Eggs	Potato	Fruit and Vegetable	Greenhouse and Nursery	Grain and Oilseed	Other	All Farms
Newfoundland	17%	-	-	-	-	28%	17%	-	33%	100%
P.E.I.	22%	24%	7%	-	30%	6%	2%	4%	9%	100%
Nova	19%	22%	4%	4%	-	21%	3%	-	12%	100%
New Brunswick	21%	22%	3%	3%	15%	11%	5%	2%	12%	100%
Quebec	38%	18%	6%	3%	1%	5%	3%	12%	12%	100%
Ontario	17%	24%	5%	3%	0%	6%	3%	29%	13%	100%
Manitoba	4%	29%	4%	1%	1%	1%	0%	52%	6%	100%
Saskatchewan	1%	22%	1%	0%	-	0%	0%	73%	1%	100%
Alberta	2%	48%	2%	2%	0%	0%	1%	36%	5%	100%
B.C.	9%	28%	1%	6%	1%	22%	8%	4%	16%	100%
Canada	11%	28%	3%	2%	1%	4%	2%	39%	8%	100%

	Dairy	Cattle	Hogs	Poultry and Eggs	Potato	Fruit and Vegetable	Greenhouse and Nursery	Grain and Oilseed	Other	All Farms
Newfoundland	0%	-	-	-	-	1%	1%	-	1%	0%
P.E.I.	2%	1%	2%	-	28%	1%	1%	0%	1%	1%
Nova	2%	1%	1%	2%	-	7%	2%	-	2%	1%
New Brunswick	2%	1%	1%	1%	15%	3%	2%	0%	1%	1%
Quebec	49%	9%	28%	21%	24%	21%	24%	5%	23%	15%
Ontario	34%	19%	37%	35%	9%	35%	33%	17%	39%	22%
Manitoba	3%	9%	13%	4%	10%	3%	1%	12%	7%	9%
Saskatchewan	2%	19%	5%	2%	-	1%	1%	45%	4%	24%
Alberta	3%	38%	12%	20%	9%	1%	14%	20%	14%	22%
B.C.	3%	4%	1%	14%	3%	27%	20%	0%	9%	4%
Canada	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Source: Farm Financial Survey, 1999

2.4 Implications for Future Safety Net Programs

There are two major implications that follow from the above analysis of the international context:

1. **While US-EU support levels significantly distort key agricultural, other factors are far more important in explaining recent price fluctuations. Canadian producers must be competitive at current prices that are now close to their long–term trends.**

The impact of EU-US support is to decrease prices and reduce market returns for Canadian farmers. However, it is a mistake to lay all the adjustment problems of the Canadian agriculture on US-EU policy. While US-EU support since the creation of the WTO has not decreased as much as we would have liked, it has not really increased and it has become far less trade distorting. The EU has replaced a significant amount of MPS with acreage payments. A greater portion of US support is in the form of historical entitlements. These programs are not completely neutral, but the current structure of US-EU support is far less distortionary than it was ten years ago.

Although US-EU support does not drive prices, it does respond to prices. Cyclically lower prices result in more support and vice versa. This should be no surprise because policies such as the LDP automatically increase payouts in response to lower prices as do the safety nets programs in Canada.

Analysis with the OECD AgLink model shows that most of the decline in prices across the current price cycle would not be alleviated with the elimination of most US-EU support. If LDP PFC and MLA payments were eliminated in the US and all direct payments in the EU, the current price of wheat for example would be US$26 per tonne higher. This is a significant amount as $26 per tonne is on the order of gross margins. However, this massive change in policy is far less important than the change in market conditions in the same period. The effect of the reduction in import demand from Southeast and East Asia, China and the NIS is $58 per tonne.

2. **U.S. style programming does not encourage a growing, competitive agriculture**

Attempting to match US-EU subsidies is not an appropriate response. Large subsidies don't fundamentally alter the adjustment problem that has to take place in the farm sector. It can delay for a few years when that adjustment will take place but the additional support will soon be overtaken by the fundamental changes that will continue to result in lower prices. However, these programs shift more of the burden of adjustment to producers in other countries including even more diversification, lower land prices, and more pressure for ad hoc support.

More seriously, support will lead to further investments in non-viable operations making future adjustments still more difficult. Recent American experience with higher subsidies demonstrates that a significant portion of subsidies results in higher land rental rates and higher asset values. About 40% of Canadian farmland is rented. While many farmers are major landowners and would therefore see this as a benefit, those renting or wanting to expand their farms may actually be penalized by the subsidies. The subsidies end up disproportionately benefiting currently well established and retiring farmers at the expense of the next generation and future competitiveness.

CHAPTER 3: FARM INCOME AND SAFETY NETS

Structural Considerations

In 2000, direct payments to Canadian farmers were estimated to be $2.8 billion, projections suggest that governments will have injected a further $5.8 billion by the end of 2002. In the context of a general economic downturn, and many other competing demands and priorities, this represents a significant investment on the part of federal and provincial governments.

Coupled with receipts from market sources, net cash income and realized net income for the primary agriculture sector are expected to be in excess of averages for the 1996 - 2000 period (figure 3.1). However, this robustness belies the relatively poor performance, and the difficult circumstances faced by some elements of the sector. To illustrate this point more clearly, in 2002, Saskatchewan's primary sector is projected to have an aggregate income (realized net income) which is some 93% of the average for 1996 - 2000 (figure 3.2). Further, the receipts contributing to this income were made up of lower than average crop receipts (6% lower) and higher livestock receipts and program payments (38% and 60% respectively). In short, without a broader context, these aggregate income measures can be somewhat misleading as to the performance of different components of the sector, and of the well being of individuals, with the income variability being masked by aggregated numbers.

To illustrate this point, the income projection reflects withdrawals from the NISA 'government accounts (Fund 2), and only what is expected to be withdrawn rather than what is available for withdrawal. Thus the full potential of NISA to act as a stabilization tool for the sector may be understated. Again, to use the example of Saskatchewan, the aggregate farm income forecast for 2002 captures about $99 million of withdrawals from Fund 2, this represents about 45% of available governments funds, and about 30% of total funds available to producers through NISA (figures 3.3 and 3.4). This projected withdrawal pattern reflects the extent to which individual circumstances and views as to how downturns can best be managed vary within the sector.

While NISA could potentially add an additional $129 million of government funds to the sectoral income of Saskatchewan agriculture, that potential is not shared equally by farmers in Saskatchewan. Quite simply some producers will have a surplus of funds in their NISA accounts while others will find themselves limited to the NISA benefits they can deem through participation.

For stabilization year 2000, about 26,000 NISA participants in Saskatchewan had "shortfalls" (the difference between the withdrawal triggered and funds available) amounting to about $530 million. At the same time, some 20,000 NISA participants held a surplus (account balances in excess of what was triggered) of about $570 million in their accounts. At the aggregate however, are potential withdrawals of $550 million in Saskatchewan ($1.4 billion for Canada), against triggered withdrawals of $1.1 billion ($3 billion for Canada).

This example holds true for all regions and all types of production in Canadian agriculture, and is not unique to NISA. This illustrates is the diversity of primary agriculture; all commodity sectors, and farmers do not contribute equally. In any given year, there will be individual farmers or sectors which are faring poorly, just as there will be those where economic performance is robust. For instance, in 1999, 31% of farms contributed 87% of the sectors output. This group of farms all had sales of at least $100,000. At the same time another group of farms, which made up about 34% of the sector, contributed only one percent of the sector's output. These

farms had sales of less than $10,000. Both groups of farms contribute to the sector, both are eligible for program benefits, yet their relative importance to its economic performance are not equal (figure 3.5).

The pattern repeats itself across all provinces with only the relative shares and importance changing. For instance, in Manitoba, large farms contribute about 87% of the sector's output (figure 3.6). Underlying this contribution is the fact that a bit less than one half (47%) of this groups contribution comes from grain and oilseed farms while about 27% is generated by hog farms (figure 3.7). In terms of income, large farms in Manitoba (i.e. sales of at least $100,000) account for about 91% of the sector's net operating income, the contribution of large grain and oilseed farms being 45% while hog farms contributed about 8%. Against this industrial structure, and during a period where the hog sector was being especially hard hit, large grain and oilseed farms collected almost 50% of government payments made to the sector, whereas hog farms collected about 14% of payments. This is not to suggest that there were no grain and oilseed producers who were not facing difficulty due to pressures such as excessive moisture with 1.1 million acres remaining unseeded. Additionally, much support made available to hog producers followed in subsequent years. It is of note that if payments per dollar of income or revenue were to be considered as measures of "equity", then large grain and oilseed farms might be seen as being somewhat advantaged, receiving a disproportionate share of payments; whereas depending up on measure chosen, the hog sector might be seen as being either relatively advantaged or disadvantaged.

Even within a relatively homogeneous group such as large Manitoba grain and oilseed farms there is a tremendous degree of diversity, particularly in regard to economic performance. For example, there is a group of 2,817 large Manitoba grain and oilseed farms (about 65% of all large grain and oilseed farms in the province) for whom data from each year from 1996 to 2000 is available (figure 3.8). On average, farms in this group had sales averaging $180,388 over the period, reported gross margins before program payments averaging $37,454, and collected about $105,000 in direct program payments. However, upon ranking this group according to economic performance (as measured by total gross margin before program payments for the period as a percent of total market receipts for the period) some dramatic differences become apparent. While there is no significant difference in economic size (sales averaging $193,366 versus $186,9560), the economic performance of the bottom twenty percent of farms is considerably worse that of the top twenty percent of farms over the same period. Before government payments, the average gross margin for the period of the bottom twenty percent of performers is -$7,620 whereas the top twenty percent of performers had average gross margins for the period of $69,410.

A further manifestation of the diversity is the relative support given to these two groups of farms by governments. In the case of the worst twenty percent of performers over the 1996 - 2000 period through a combination of Crop Insurance, NISA, disaster programming and ad hoc payments received $182,894, an average of $36,579 annually. By comparison, the top twenty percent of performers collected only $55,111 over the period averaging about $11,022 annually.

Even more striking is the magnitude of the differences when the same performance measure (gross margin before program payments as a percent of market revenue) is estimated on an annual basis, and those farms falling into the smallest twenty percent and largest twenty percent each year are identified. In the case of Manitoba grain and oilseed farms 39 farms remain in the lowest twenty percent in each of the years whereas 62 remain in the top twenty percent. Again, there are not dissimilar sales levels, yet those farms in the smallest twenty percent perform markedly worse, with gross margins before program payments remaining significantly negative

throughout the period, averaging -$82,581. In total, this group of 39 farms received almost $14 million in government payments over the 1996 - 2000 period. Clearly government payments play a significant role in the ongoing viability of these operations affording them the opportunity to remain in business. Similarly, it is very probable that non-farm income is being used on an ongoing basis to offset farm losses. However, it must be noted that by 2000, even an average government payment of $71,592 is barely sufficient to generate a positive gross margin after program payments.

It should be noted that although the "poor" performers (both lowest 20% of performers over the period and those continuously in this class) receive significantly larger government payments than do their counterparts, it is not a sustainable level of support given the nature of disaster programming. While, NISA support available to the "poor" performers, would remain relatively constant, the support afforded under the margin based disaster programming will deteriorate as margins continue to decline. Similarly, to the extent that the "poor" performers had deteriorating yields coverage levels for crop insurance would also be likely to decline, reducing the probability of payments. This is an issue which is not specific to this group of farms, but is a general condition where margins may be declining for any one of a number of reasons. More generally, it is evident that there is a contradiction between stabilization over a longer term and reference margins which are based on relatively short periods. Conversely, the margin based program will also tend to generate large payments after price/income spikes, resulting in the situation where incomes are in excess of average levels yet disaster payments are being made.

One conclusion is that incomes are being stabilized for producers in both the top 20% and bottom 20% of "performers". However, it is clear that the incomes of the "poor" performers are being stabilized at much lower levels.

Against the backdrop of the sector's diversity, it becomes apparent that it is difficult to find a satisfactory measure of equity and effectiveness and definitions agreeable to all. As indicated in the July 2000 agreement, this principle is about treating farmers in similar circumstances similarly. Superficially this should be a simple matter, however, one only need consider the support given to the top 20% of "performers" as opposed to that afforded the bottom 20%. One possible interpretation of equity in this sense would be that support is made on the basis of a constant share, such as NISA for example, where contributions are made at a fixed rate. While this is equitable treatment in one sense, those farmers who face "higher" production risks or who consistently have below average margins due to poor management, bottom 20%, for example, will need to put more into their accounts, or endure low or inadequate account balances. Alternatively, under crop insurance, for example, production risks are reflected in the premium rates and coverage levels. Riskier enterprises are likely to pay higher premiums for similar levels of coverage, therefore since governments pay a constant share of these premiums; the riskier enterprises are also likely to receive, in absolute terms, more government support.

In sum, Canada's primary agriculture is hugely diverse with aggregates masking the performance of not only provincial and commodity sectors, but of the individual farms which of which the sector is comprised. While, analysis tends to focus on farm size and commodity orientation, the range of diversity within these seemingly homogeneous groups is staggering, often suggesting that there is as much diversity within groups as there is among groups. This diversity complicates the assessment of how safety net programs have performed, especially against a principle as abstract and subjective as equity. At best, it might be demonstrated that under a given set of conditions individuals may or may not be treated equitably, but any extrapolation to what may or may not constitute equity among commodity sectors or regions would be highly interpretative and require clearer, more precise and rigorous definitions.

Program Performance

The objective as enunciated in July 2000 Agreement on Agricultural Risk Management is focussed on management and reduction of risk, including but not limited to income stabilization. An outcome of this lack of specificity is a resulting tension between the objective of income stabilization and an objective of income support.

In general, while the dual objectives of income support and stabilization are met to varying degrees by safety net programs, they are, in general, designed to deal with income stabilization rather than income support. The consequence of this is that for many small farm operations, provide funding levels that are appropriate for income stabilization yet not sufficiently large to guarantee a minimum income level.

For example, contributions to NISA are based on three percent of a farm's eligible net sales; thus a farm which has sales of $50,000 is eligible for only $1,500 in government support. As a result, although NISA has a Minimum Income Trigger, for many small farms, income support would be nominal at best, and certainly inadequate to guarantee a minimum standard of living. The magnitude of support afforded by disaster programming would not be dissimilar. This point is illustrated in figure 3.9 where farms have been ranked according to total family income. It is clear that families operating small farms are reliant on off-farm income, similarly, it is clear that the contribution of government programs is limited. Even when considering those small farms in receipt of the largest 20% of payments made to farms within that class (figure 3.10), program payments are inadequate to allow families achieve a minimum standard of living in without non-farm income and other options. While these particular data do not reflect the current risk management agreement, there is little reason to expect this situation to have changed in the intervening years.

This issue remains for many medium sized farms as well. The average program payments made to a combined group of small and medium sized farms in 1999 averaged $2,640 for all farms in this size class in Canada, ranging from $845 in British Columbia to $6,405 in Quebec (figure 3.6b). Again, without other sources of income, farms of this scale might find themselves in difficult economic situations.

While having the common goal of stabilizing incomes, the core safety net programs take different approaches to achieve this goal. As a result, there are elements of overlap and duplication in coverage, as well as gaps in coverage. For example, crop farms have available NISA, disaster programming and crop insurance. Governments are silent on how NISA is to be used by participants. Therefore at a conceptual level, NISA can be said to be available to deal with any income loss, with the ultimate decision of how available funds might be best allocated being left to the individual producer. Additionally, NISA funds can be accessed when income from all sources falls below a specified threshold, regardless of the performance of the farming enterprise. Disaster programming on the other hand is in place to deal only with margin reductions of 30 to 100 percent. Finally, crop insurance is available to crop producers and provides some level of negative margin coverage, as well as some degree of positive margin coverage. Payments from crop insurance are reflected in margin calculations, therefore reducing payments accordingly. Nevertheless, there is considerable scope for overlap in coverage regardless of the form program linkages might take. A graphical representation of the overlap of safety net program coverage overlap can be found in figure 3.11.

A further complication in defining the extent to which there exists duplication of coverage is that despite some complimentarity, payments are triggered on different basis for each of the core programs. Crop insurance is based on a long-term average yield whereas both NISA and disaster programming are based on margin calculations. However, NISA uses a five year reference period, whereas as disaster programming makes use of either a three year average, or a three of five year average, where the highest and lowest margins are removed from the calculation (three year olympic average). Further complicating this is the fact that payments for disaster programming take into account a series of accrual adjustments, thus, not only are reference margins determined differently, the current year margins defined by the two programs are different as well. The end result is that it is quite possible to observe a situation where a producer who has triggered a "disaster" payment has not triggered a NISA withdrawal, or conversely a producer has triggered a NISA withdrawal but not a disaster payment.

In short, linking programs with different purposes/objectives, and which function in a variety of fashions are virtually impossible to line in a seamless manner. Additional difficulty is related to appropriately defining a reference period against which income losses are to be measured. While consistent with the letter of the WTO text, a "straight" three year reference margin is likely an insufficiently long period. Conversely, a reference period longer that five years in duration will face distortion resulting from the ongoing technological and structural changes which the sector undergoes. An alternative allowed by WTO rules is the three year olympic average, this form of average provides a much more stable basis against which incomes can be referenced. However, it must be noted that while it decreases much more slowly than incomes, it also increases much at a much slower rate. Finally, it is worth considering the value of meeting WTO requirements if the greatest trade risks are related to countervail threats from the United States, particularly if the future of the green box criteria is unclear.

Another issue to consider in the assessment of the effectiveness of safety net programs to provide income stabilization is that effects are temporal. In some senses this is an academic issue relating to how stabilization is measured, yet there are potentially significant cash flow impacts which can be felt through the delivery of safety net programs. For instance, crop insurance will often pay in the same calendar year as the losses, and in some instances, producers will have those funds in hand before they would have sold the actual crop. Conversely, both NISA and disaster programming are based on tax information resulting in payments being made after the fact, at least one calendar beyond the timing of the event itself. Thus, it is important to consider stabilization in both an "accrual" and a "cash" context.

To illustrate this point using the example of large Manitoba grain farms (figure 3.12), on a cash basis incomes, after program payments, were reasonably stable; certainly income loses were significantly mitigated through the 1996 - 2000 period. Throughout this period incomes in the grain and oilseed sector were generally in decline therefore the impact of lagged program payments was muted, and perhaps even helpful in stabilizing incomes. However, the intersection of stronger prices, a larger crop and program payments (including ad hoc payments) will result in incomes being greatly in excess of any observed over the preceding five years. The average payment to this group of farms in 2001 is expected to be about $63,000, to which crop insurance contributes about $11,000, NISA about $7,000 and CFIP 2000 about $4,400. However, in addition to these payments are ad hoc payments of about $10,000 and payments relating to AIDA 1999 of $14,000. Clearly on a cash basis, the totality of government payments appears to have overcompensated farmers in 2001, however, this should be considered only in relation to a preceding or subsequent year.

How effective were the programs relating to Stabilization Year 1999? Clearly on a cash basis, with payments for AIDA being made in 2001, there is a significant impact on cashflow. However, even on an accrual basis, there appears to be evidence that safety net programs duplicated coverage of losses. Again using large Manitoba grain farms to illustrate, for 4,012 farms for which data is available. 1,317 applied for and received AIDA. These payments were made over and above what was available from NISA, which was also accessed. The combination of NISA and AIDA allowed farmers in this group to exceed their NISA reference margins by about $30,000 (Figure 3.13). Of the remaining farms, 895 made application to AIDA for assistance but were ineligible for support. On average, this group had current year margins which were in either excess of their reference margins (as illustrated by the group average) or were less than 30% below the reference margin; however, about half of this group had access to their NISA account through the Minimum Income Trigger (i.e. 455 participants had Minimum Income Triggers which were in excess of their stabilization triggers). Similarly, those 1,800 farms which did not apply for AIDA reported current margins in excess of the reference period, but had access to government support through NISA. These patterns repeat themselves as illustrated in figures 3.14 through 3.17.

In general, safety net programs have provided a significant measure of stabilization to the incomes of those farms who make use of them, regardless of region or farm type. For instance, the impact of the disaster programming being made available can be seen when considering the net cash income stream of large Ontario hog farms (Sales of $100,000 and over) for the period 1996 - 2000. Prior to the introduction of disaster programming in 1999 (for stabilization year 1998), these farms had to rely on NISA and other programs. As a result, on average, there remained NISA balances of about $23,000 at the end of 1998, and unused NISA withdrawals of about $7,600, this group of farms reported slightly negative cash income after accounting for capital cost allowance (CCA). In 1999 however, this same group of farms had lower average net market incomes (after CCA) but the combination of NISA and support from the disaster program lifted net cash income substantially. However, the lag effects of the programs can be seen as hog markets recovered through 2000 where the combination of net market income and program payments resulted in net cash incomes being significantly higher than for any other point through the period (Figure 3.18).

There are two additional groups of farms which provide some illustration of how safety net programming has worked for farms which after accounting for CCA, have experienced low incomes since 1996, which are projected continue into 2002. In the first case, medium size fruit and vegetable farms in British Columbia (sales of $50,000 to $100,000), a group largely consisting of apple farms in the Okanagan, have reported negative net market income (after CCA) throughout the base period (1996 - 2000) and are projected to have negative market incomes (after CCA) in 2001 and 2002. Through this period program support has increased from about $10,000 in 1996, to a projected high of about $16,000. This support has come predominantly from crop insurance, with NISA and disaster programming also contributing some degree of stabilization. With the exception of 1998, an extraordinarily poor year for these farms, incomes have been stabilized, albeit at relatively low absolute levels over the period (figure 3.19).

The case of large potato farms in Prince Edward Island, and the role safety nets have played is somewhat more complicated. With the exception of two years between 1996 and 2002, this group of farms has, on average, net market incomes which are negative, in the cases of forecast years 2001 and 2002, significantly negative (figure 3.20). Programs payments, including ad hoc, have stabilized incomes within a relatively small income band relative to the size of the farm, however, the resulting net cash income after CCA is low, and in two of the years remains negative. There are several complications however. In the first instance, ad hoc payments made for potato wart

offset, what producers would have been eligible for from the disaster program, and in some cases more than offset. In the second instance, on average, this group is expected to exit the 2002 with NISA balances in excess of $135,000, a $35,000 increase over the average balance at the end of 2000. This begs questions not only of how these account balances are distributed among this group of farms, but also as to the effectiveness of linkages between NISA and other programs. Further, it raises questions as to why, as a group, these farms did not make greater use of the stabilizing potential of NISA (see Annex 11 for Summary of Producer Concerns)

In response the question of how account balances are distributed, about a quarter of large Prince Edward Island potato farms have NISA accounts which represent less than 30% of their NISA reference margins; account balances which currently average about $22,000. The remaining three-quarters of these farms have balances which are, on average, $127,000.

It should be noted that the distribution of NISA account balances is not equally as positive in all sectors, in all regions of Canada, nor among all farm sizes. For example, nationally, about 40% of NISA participants have account balances which are less than 30% of their five-year reference margins. However, large hog farms in Ontario and large cattle farms in Alberta are notably worse off, with 50% and 59% of participants having "inadequate" account balances (figures 3.22, 3.23 and 3.24)

Summary

For many farmers in Canada, the suite of safety nets currently available has provided some measure of stability in their incomes. However, there are gaps. Those who are in more need of income support than income stabilization would be better served with an alternative set of tools directed specifically at meeting the requirements they have to improve their situations. As well, individuals who are facing chronically deteriorating incomes, regardless of the reason, have found, and will continue to find that their incomes stabilized at similarly decreasing levels.

Finally, there is sufficient overlap and duplication in the income losses covered by existing programs that over-stabilization can and does occur. This is confounded not only by lack of clarity in the role that NISA is expected to play in stabilizing farm incomes, but also by the many discrepancies in how programs measure income loss. For instance, the two margin based programs have a variety of ways in which payments may be determined. The disaster program allows for a reference margin (with accrual adjustments) of either three years, or the middle three of five years, beginning and expanding farms are treated differently yet again. Withdrawals from NISA can be taken, at the discretion of the participant, whenever the current margin falls below a five-year reference margin (without accrual adjustments) or when income from all sources falls below a threshold. As a result withdrawals can be taken even if there has been growth in the gross margin.

While modifications could lead to improvement there is a risk that doing so would make them considerably more complex. It would seem, therefore, that rather than taking a piecemeal approach to program improvement a more fruitful approach would be to make significant changes in how governments approach stabilizing the incomes of farmers and develop or redevelop a new, improved set of risk management tools.

Figure 3.1

CANADA

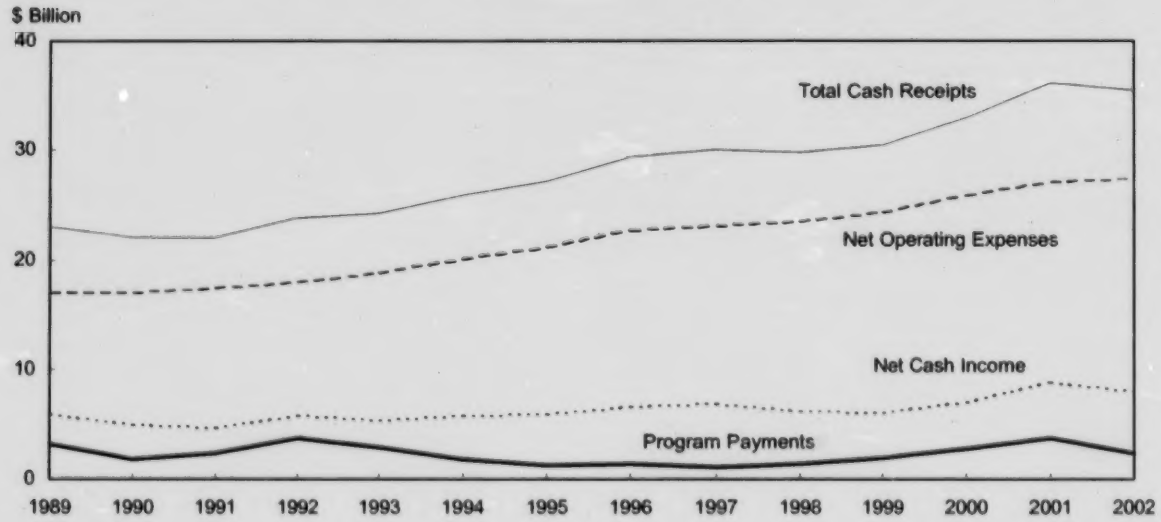
Farm Cash Receipts, Expenses and Income

	2000	Average 1996-00	2001	Percent change 01/00	Percent change 01/96-00	2002	Percent change 02/01	Percent change 02/96-00
	$ million	$ million	$ million	%	%	$ million	%	%
Total Crops	13,114	13,745	13,595	4	-1	14,192	4	3
Total Livestock	17,030	15,034	18,746	10	25	18,880	1	26
Market Receipts	30,144	28,779	32,341	7	12	33,071	2	15
Program Payments	2,829	1,730	3,729	32	116	2,371	-36	37
Total Cash Receipts	32,973	30,508	36,070	9	18	35,442	-2	16
Net Operating Expenses	25,932	23,953	27,197	5	14	27,419	1	14
Net Cash Income	7,041	6,555	8,873	26	35	8,023	-10	22
Realized Net Income	3,160	2,887	4,985	58	73	4,077	-18	41
Total Net Income	3,054	3,067	3,709	21	21	5,235	41	71

Source: Historical data (2000), Statistics Canada, Catalogue No. 21-603, Agriculture Economic Statistics.
Forecast figures for 2001 and 2002, Agriculture and Agri-Food Canada.

Net cash income is a measure of the cash available to producers from the farming business for living expenses, principal repayment and reinvestment in the farm. Realized net income includes depreciation charges and income-in-kind. Total net income accounts for changes in on-farm inventory.

Farm Cash Receipts, Program Payments, Expenses and Net Cash Income, 1989 to 2002



January 2002

SASKATCHEWAN

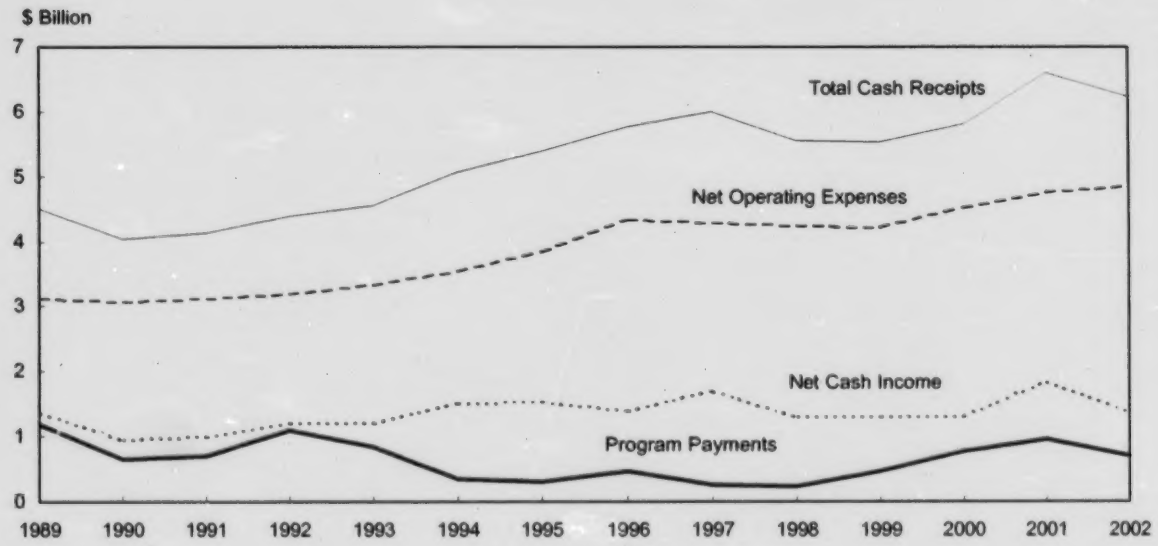
Farm Cash Receipts, Expenses and Income

	2000	Average 1996-00	2001	Percent change 01/00	Percent change 01/96-00	2002	Percent change 02/01	Percent change 02/96-00
	$ million	$ million	$ million	%	%	$ million	%	%
Total Crops	3,474	3,995	3,873	11	-3	3,746	-3	-6
Total Livestock	1,568	1,294	1,761	12	36	1,781	1	38
Market Receipts	5,043	5,289	5,634	12	7	5,527	-2	5
Program Payments	776	444	963	24	117	708	-26	60
Total Cash Receipts	5,818	5,732	6,597	13	15	6,235	-5	9
Net Operating Expenses	4,523	4,330	4,756	5	10	4,852	2	12
Net Cash Income	1,296	1,402	1,841	42	31	1,383	-25	-1
Realized Net Income	425	555	972	129	75	517	-47	-7
Total Net Income	516	632	153	-70	-76	942	516	49

Source: Historical data (2000), Statistics Canada, Catalogue No. 21-603, Agriculture Economic Statistics.
Forecast figures for 2001 and 2002, Agriculture and Agri-Food Canada.

Net cash income is a measure of the cash available to producers from the farming business for living expenses, principal repayment and reinvestment in the farm. Realized net income includes depreciation charges and income-in-kind. Total net income accounts for changes in on-farm inventory.

Farm Cash Receipts, Program Payments, Expenses and Net Cash Income, 1989 to 2002



January 2002

NISA Forecast, 2001 to 2002, Canada

	2001	2002
	($)	
Projected Total Withdrawals		
Fund 1	271,198,240	133,359,550
Fund 2	498,854,427	353,365,813
Total	770,052,668	486,725,362
Projected Total Deposits		
Fund 1	360,284,827	379,079,985
Fund 2	357,433,030	375,350,651
Total	717,717,857	754,430,636
Projected Year End Balances		
Fund 1	1,764,525,391	2,010,245,826
Fund 2	1,564,992,971	1,792,032,332
Total	3,329,518,362	3,802,278,158
Potential Withdrawals		
Fund 1	510,311,094	398,070,147
Fund 2	988,681,453	696,732,357
Total	1,498,992,547	1,094,802,505

NOTES:

NISA (Net Income Stabilization Account): A voluntary program developed jointly between producers, the Government of Canada and participating provinces. Part of the Canada's farm safety net framework, NISA is designed to help producers achieve long-term farm income stability on an individual basis. Producers deposit money annually into their NISA account and receive matching government contributions. (For more information, visit NISA on the internet at http://www.agr.ca/nisa/).

Total Withdrawals: Total funds actually withdrawn by producers under the NISA program in the year indicated.

Fund 1: Fund that holds the participants matchable and non-matchable deposits under the NISA program

Fund 2: Fund that holds the government contributions (federal and provincial) and all interest earned on both funds, including bonus interest. Withdrawals are first taken from Fund 2. Once Fund 2 is depleted, withdrawals are taken from Fund 1.

Total Deposits: Total participant deposits and government contributions. Participant deposits and government contributions do not equal due to differing Self-Directed Risk Management (SDRM) contribution rates in Ontario.

Year End Balances: Total Fund 1 and Fund 2 balances after considering deposits, accumulated interest and withdrawals for the year indicated.

Potential Withdrawals: Total funds available for withdrawal on an annual basis taking into account both fund balances and payments triggered under the program.

January 2002

NISA Forecast, 2001 to 2002, Saskatchewan

	2001	2002
	($)	
Projected Total Withdrawals		
Fund 1	93,020,717	33,281,316
Fund 2	188,272,060	98,700,785
Total	281,292,777	131,982,101
Projected Total Deposits		
Fund 1	104,191,953	114,422,808
Fund 2	104,191,954	114,422,808
Total	208,383,907	228,845,616
Projected Year End Balances		
Fund 1	589,887,067	671,028,559
Fund 2	590,462,181	676,956,698
Total	1,180,349,248	1,347,985,257
Potential Withdrawals		
Fund 1	181,247,242	101,918,845
Fund 2	396,192,832	195,676,367
Total	577,440,074	297,595,211

NOTES:

NISA (Net Income Stabilization Account): A voluntary program developed jointly between producers, the Government of Canada and participating provinces. Part of the Canada's farm safety net framework, NISA is designed to help producers achieve long-term farm income stability on an individual basis. Producers deposit money annually into their NISA account and receive matching government contributions. (For more information, visit NISA on the internet at http://www.agr.ca/nisa/).

Total Withdrawals: Total funds actually withdrawn by producers under the NISA program in the year indicated.

Fund 1: Fund that holds the participants matchable and non-matchable deposits under the NISA program

Fund 2: Fund that holds the government contributions (federal and provincial) and all interest earned on both funds, including bonus interest. Withdrawals are first taken from Fund 2. Once Fund 2 is depleted, withdrawals are taken from Fund 1.

Total Deposits: Total participant deposits and government contributions. Participant deposits and government contributions do not equal due to differing Self-Directed Risk Management (SDRM) contribution rates in Ontario.

Year End Balances: Total Fund 1 and Fund 2 balances after considering deposits, accumulated interest and withdrawals for the year indicated.

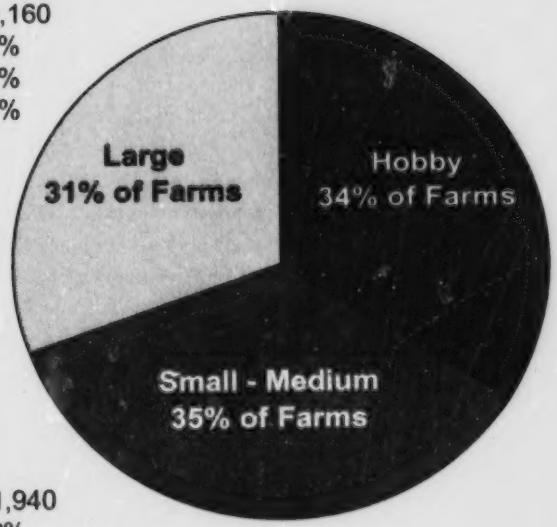
Potential Withdrawals: Total funds available for withdrawal on an annual basis taking into account both fund balances and payments triggered under the program.

January 2002

Figure 3.5

Distribution of Farms and Share of Program Payments in Canada

Number of Farms	79,160
% of Market Receipts	87%
% of Program Payments	80%
% of Net Operating Income	96%



Number of Farms	88,105
% of Market Receipts	1%
% of Program Payments	1%
% of Net Operating Income	-6%

Number of Farms	91,940
% of Market Receipts	12%
% of Program Payments	19%
% of Net Operating Income	10%

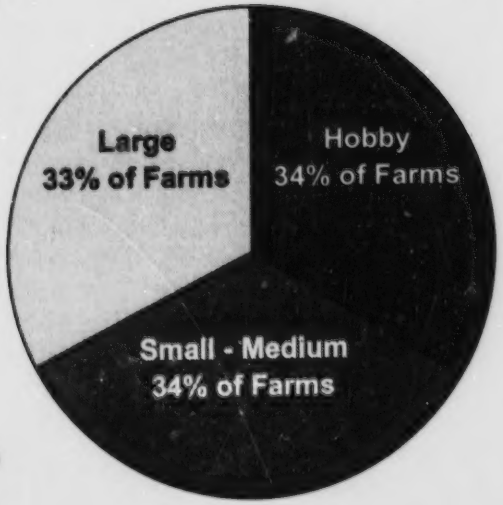
Hobby: Farm Sales less than $10,000
Small - Medium: Farm Sales between $10,000-$99,999
Large: Farm Sales greater than $100,000

Source: AAFC Internal Estimates

Figure 3.6

Distribution of Farms and Share of Program Payments in Manitoba

Number of Farms	7,650
% of Market Receipts	87%
% of Program Payments	78%
% of Net Operating Income	96%



Number of Farms	7,870
% of Market Receipts	1%
% of Program Payments	1%
% of Net Operating Income	-6%

Number of Farms	7,960
% of Market Receipts	12%
% of Program Payments	22%
% of Net Operating Income	10%

Hobby: Farm Sales less than $10,000
Small - Medium: Farm Sales between $10,000-$99,999
Large: Farm Sales greater than $100,000

Source: AAFC Internal Estimates

Figure 3.6a

Averages for Selected Income Variables

	# of farms	Average Market Receipts	Average Program Payments	Average Net Op. Income
B.C. Hobby	9,610	3,622	247	(4,947)
B.C. Small-Medium	4,447	37,266	845	1,532
B.C. Large	3,014	492,985	4,165	89,823
Alberta Hobby	19,235	4,245	84	(3,863)
Alberta Small-Medium	21,447	43,911	1,304	5,501
Alberta Large	16,645	392,872	8,704	63,796
Saskatchewan Hobby	17,285	4,498	173	(508)
Saskatchewan Small-Medium	24,566	43,524	3,278	5,919
Saskatchewan Large	17,023	231,047	9,139	38,802
Manitoba Hobby	7,870	3,831	126	(2,987)
Manitoba Small-Medium	7,959	41,690	3,269	4,792
Manitoba Large	7,648	318,765	12,222	48,579
Ontario Hobby	23,245	4,076	162	(5,364)
Ontario Small-Medium	20,184	37,465	1,646	4,939
Ontario Large	18,209	384,652	9,900	76,603
Quebec Hobby	7,140	4,107	470	(1,740)
Quebec Small-Medium	10,711	37,169	6,405	10,319
Quebec Large	14,187	291,661	29,975	73,186
Atlantic Hobby	3,725	3,255	78	(2,451)
Atlantic Small-Medium	2,622	35,734	1,000	6,025
Atlantic Large	2,431	434,072	10,878	70,531
Canada Hobby	88,105	4,092	175	(3,409)
Canada Small-Medium	91,937	40,860	2,640	5,812
Canada Large	79,157	335,958	13,119	62,778

Figure 3.7

Contribution of Large Farms, Manitoba, 1999

Farm Type	# of All Farms	% of Total Farms	% of Total Market Receipts	% of Total Net Operating Income	Average Income per farm: Net Operating Income	Average Income per farm: Program Payments	% of Total Program Payments
Grain and Oilseed	4,349	27.9	41.5	45.1	42,527	13,567	49.4
Cattle	1,353	8.7	11.5	13.6	41,050	6,927	7.8
Hog	554	3.5	14.9	8.3	61,716	30,578	14.2
Supply Managed	646	4.1	7.6	12.6	79,871	7,209	3.9
Horticulture	174	1.1	6.8	5.9	138,289	6,345	0.9
Other Types	572	3.7	5.3	5.2	37,017	4,180	2.0
TOTAL	**7,648**	**49.0**	**87.6**	**90.7**	**48,576**	**12,221**	**78.2**

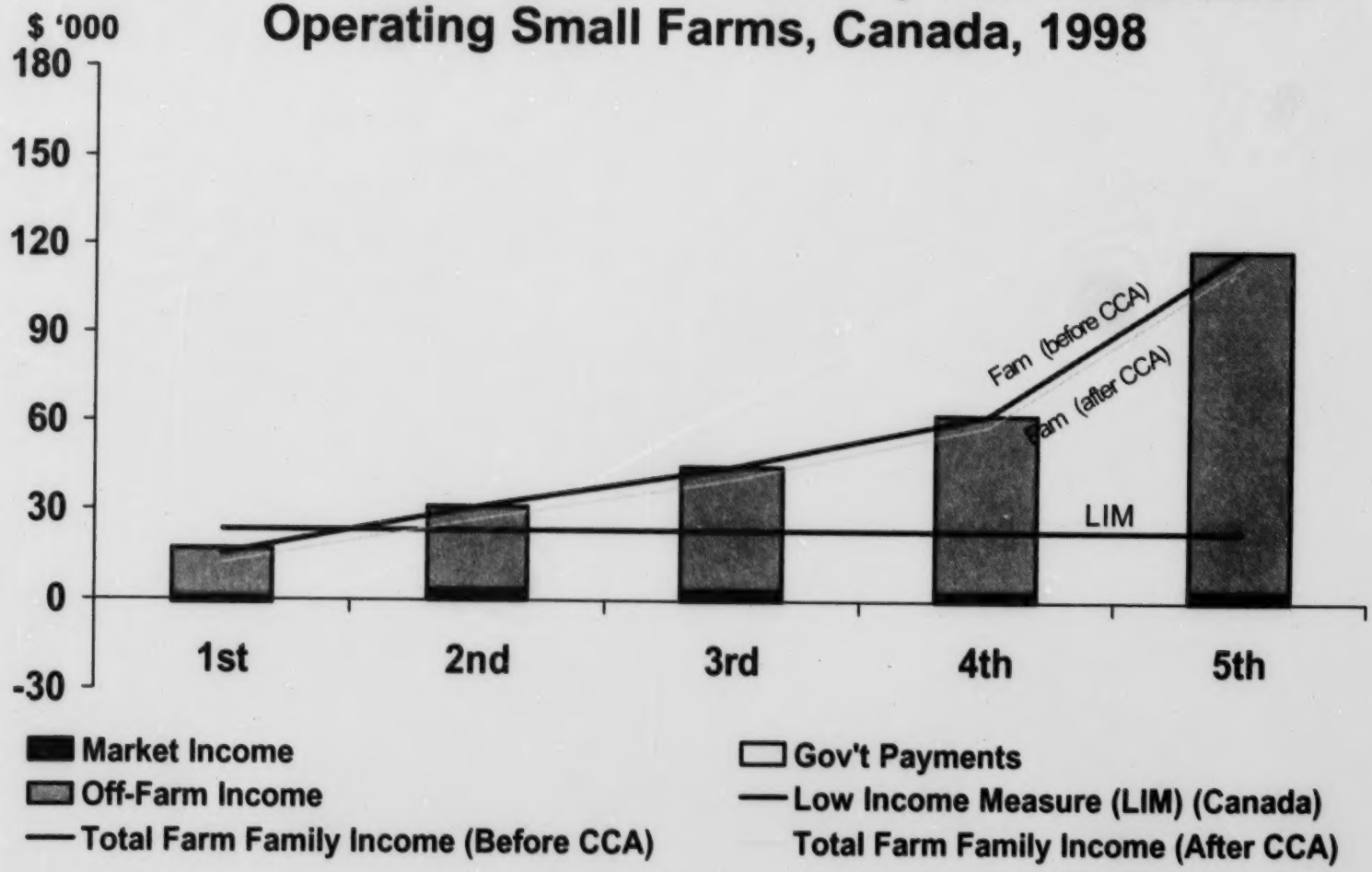
Source: AAFC FDA Section internal estimates based on 2000 Farm Financial Survey

Manitoba Grain and Oilseed Farms, Average Sales 1996 - 2000 $100,000 and Greater

	All Continuing	Gross Margin before Payments as a %age of Sales		Gross Margin before Payments as a %age of Sales	
		Smallest 20% over Period	Largest 20% over Period	Smallest 20% each year	Largest 20% each year
Number of Farms	2,817	564	564	39	62
Sales					
1996	$ 198,474	$ 201,641	$ 190,374	$ 197,437	$ 211,983
1997	$ 213,433	$ 224,161	$ 196,626	$ 216,196	$ 208,707
1998	$ 208,381	$ 250,693	$ 194,526	$ 216,401	$ 210,016
1999	$ 190,480	$ 175,682	$ 187,825	$ 184,556	$ 201,393
2000	$ 176,621	$ 159,652	$ 165,430	$ 153,372	$ 178,962
Average	$ 180,388	$ 193,366	$ 186,956	$ 193,592	$ 202,212
Gross Margin before Payments					
1996	$ 50,235	$ 15,639	$ 76,138	$ (73,518)	$ 103,461
1997	$ 47,125	$ 13,584	$ 72,854	$ (64,018)	$ 93,962
1998	$ 47,911	$ 5,435	$ 77,570	$ (58,695)	$ 101,183
1999	$ 34,436	$ (21,343)	$ 75,621	$ (83,198)	$ 97,581
2000	$ 7,562	$ (51,417)	$ 44,867	$ (133,474)	$ 69,826
Average	$ 37,454	$ (7,620)	$ 69,410	$ (82,581)	$ 93,203
Payments					
1996	$ 13,248	$ 25,702	$ 6,393	$ 77,909	$ 6,556
1997	$ 18,400	$ 29,890	$ 11,220	$ 63,552	$ 11,531
1998	$ 15,197	$ 28,839	$ 7,246	$ 56,811	$ 6,788
1999	$ 22,536	$ 41,917	$ 9,549	$ 67,569	$ 7,838
2000	$ 35,298	$ 56,546	$ 20,704	$ 92,118	$ 19,779
Average	$ 20,936	$ 36,579	$ 11,022	$ 71,592	$ 10,498
Total 1996 - 2000	$ 104,679	$ 182,894	$ 55,111	$ 357,959	$ 52,490
Gross Margin after Payments					
1996	$ 63,483	$ 41,341	$ 82,531	$ 4,391	$ 110,017
1997	$ 65,525	$ 43,474	$ 84,074	$ (466)	$ 105,493
1998	$ 63,108	$ 34,274	$ 84,816	$ (1,884)	$ 107,971
1999	$ 56,972	$ 20,574	$ 85,170	$ (15,629)	$ 105,419
2000	$ 42,860	$ 5,129	$ 65,571	$ (41,356)	$ 89,605
Average	$ 58,390	$ 28,959	$ 80,432	$ (10,989)	$ 103,701
Group Totals					
Sales 1996 - 2000	$ 2,781,475,451	$ 545,291,512	$ 527,216,664	$ 37,750,491	$ 62,685,719
Payments 1996 - 2000	$ 294,881,854	$ 103,152,082	$ 31,082,632	$ 13,960,386	$ 3,254,416
Payments as % of Sales	10.6%	18.9%	5.9%	37.0%	5.2%
% of Group Sales		19.6%	19.0%	1.4%	2.3%
% of Group Payments		35.0%	10.5%	4.7%	1.1%

Figure 3.9

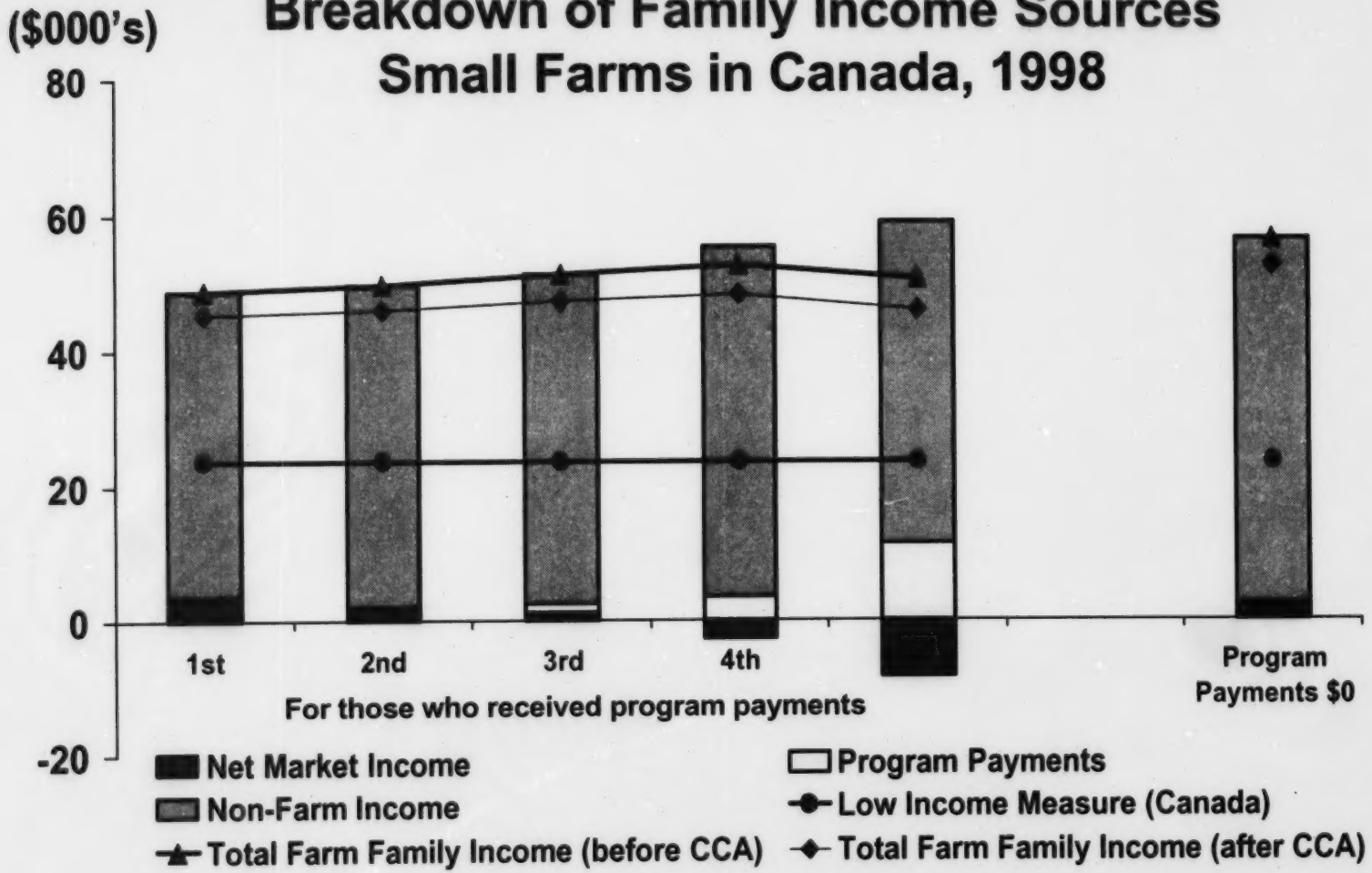
Quintile Breakdown of Farm Family Income Sources Operating Small Farms, Canada, 1998



Source: Statistics Canada , Taxfiler Database and Small Area Administration Data.

Figure 3.10

Quintiles Based on Program Payments Breakdown of Family Income Sources Small Farms in Canada, 1998



Non-farm income includes employment income, investment income, pension income and other income. NISA withdrawals from the government fund are included in other off-farm income.

Source: Statistics Canada , Taxfiler Database.

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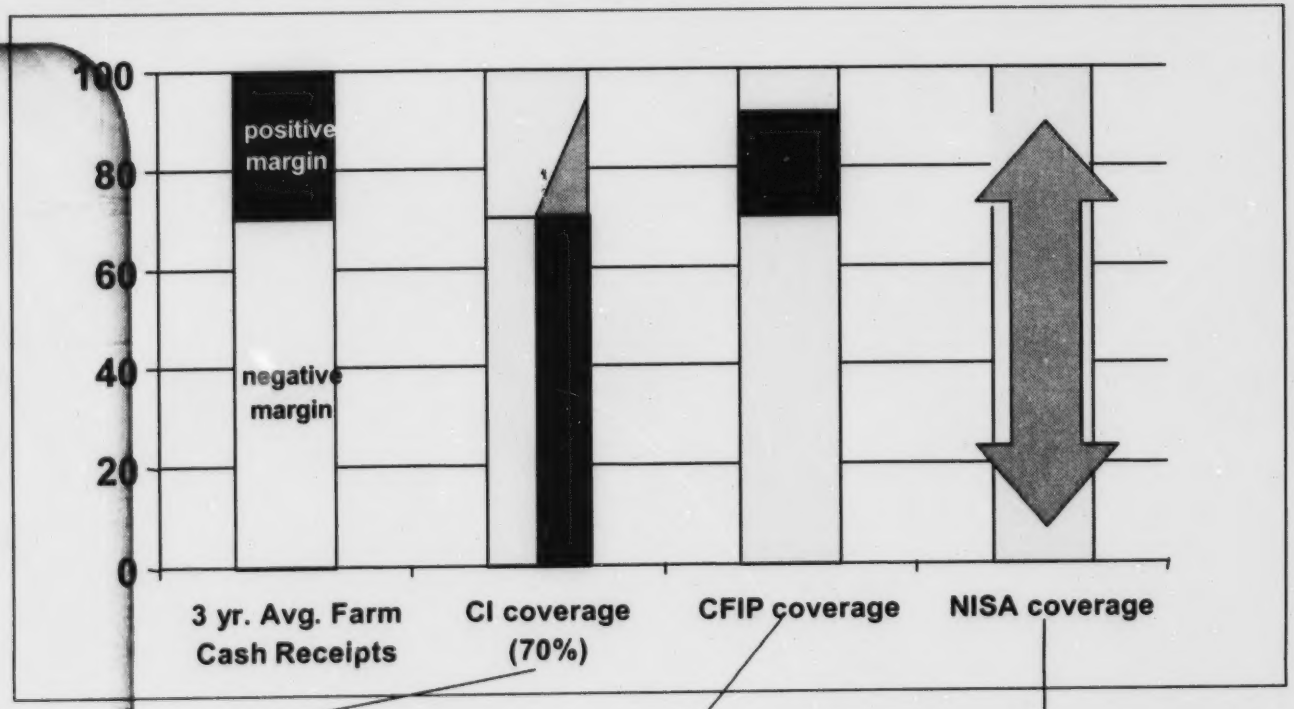
Figure 3.11

Safety Net Program Coverage

Sector Coverage - Assumes 30% Average Farm Margin



- Negative margin coverage
- Crops only
- Premium-based
- Long-term average yield Trigger

- Positive margin coverage
- Gross margin trigger

- Positive/negative margin coverage - limited to individual fund balance
- Contribution-based
- Gross margin trigger

Figure 3.12

Net Cash Income (After CCA), Grains & Oilseeds, Manitoba

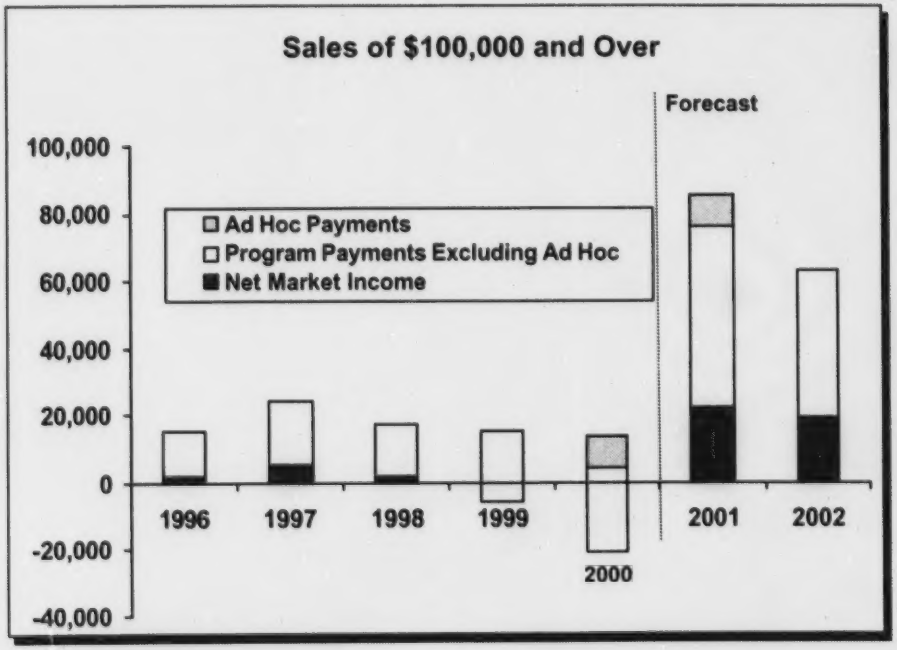
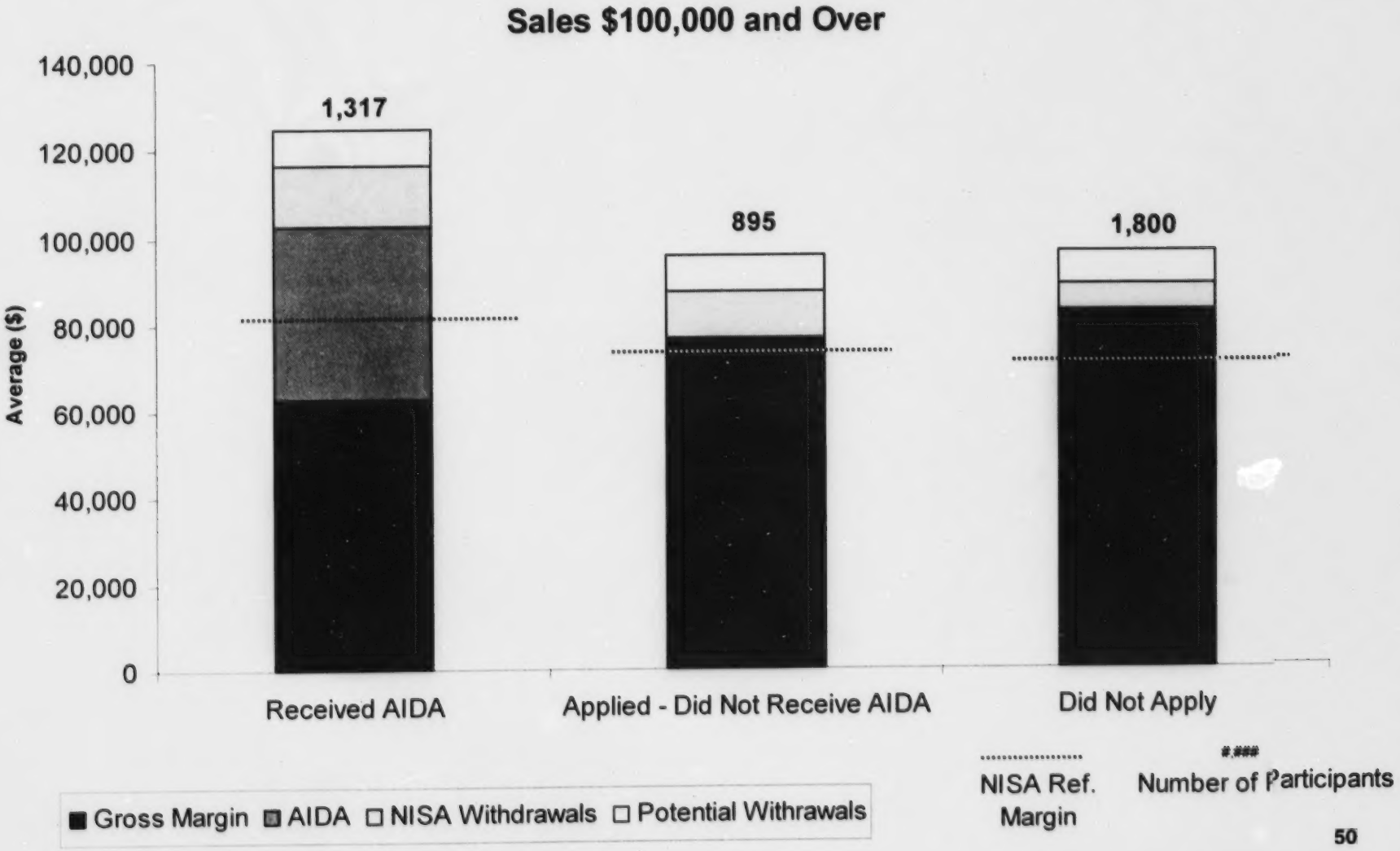


Figure 3.13

Impact of safety nets for large grain and oilseed farms in Manitoba, stabilization year, 1999



Net Cash Income (After CCA), Grains & Oilseeds, Manitoba

Figure 3.14

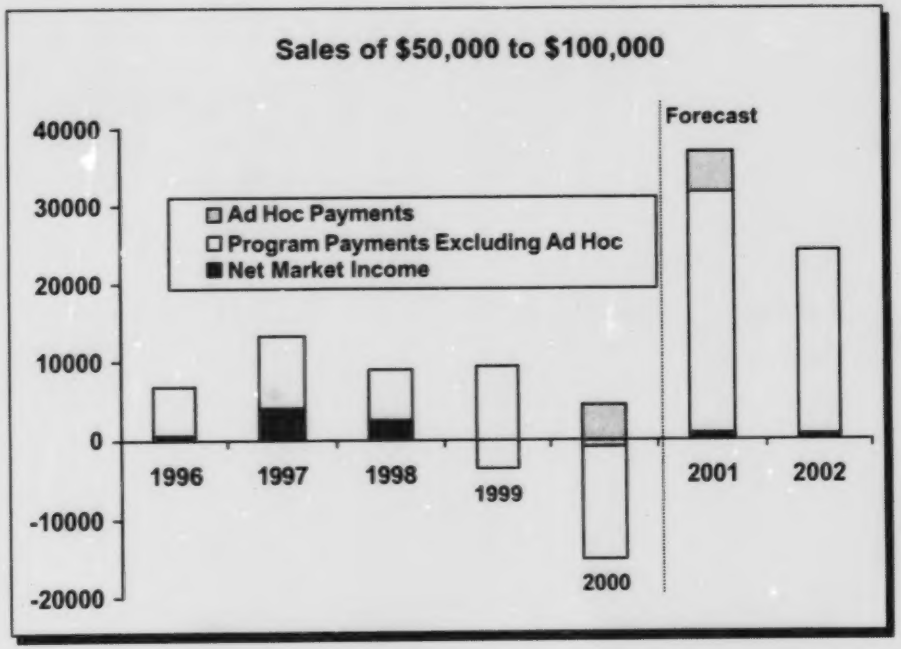


Figure 3.15

Impact of safety nets for medium grain and oilseed farms in Manitoba, stabilization year, 1999

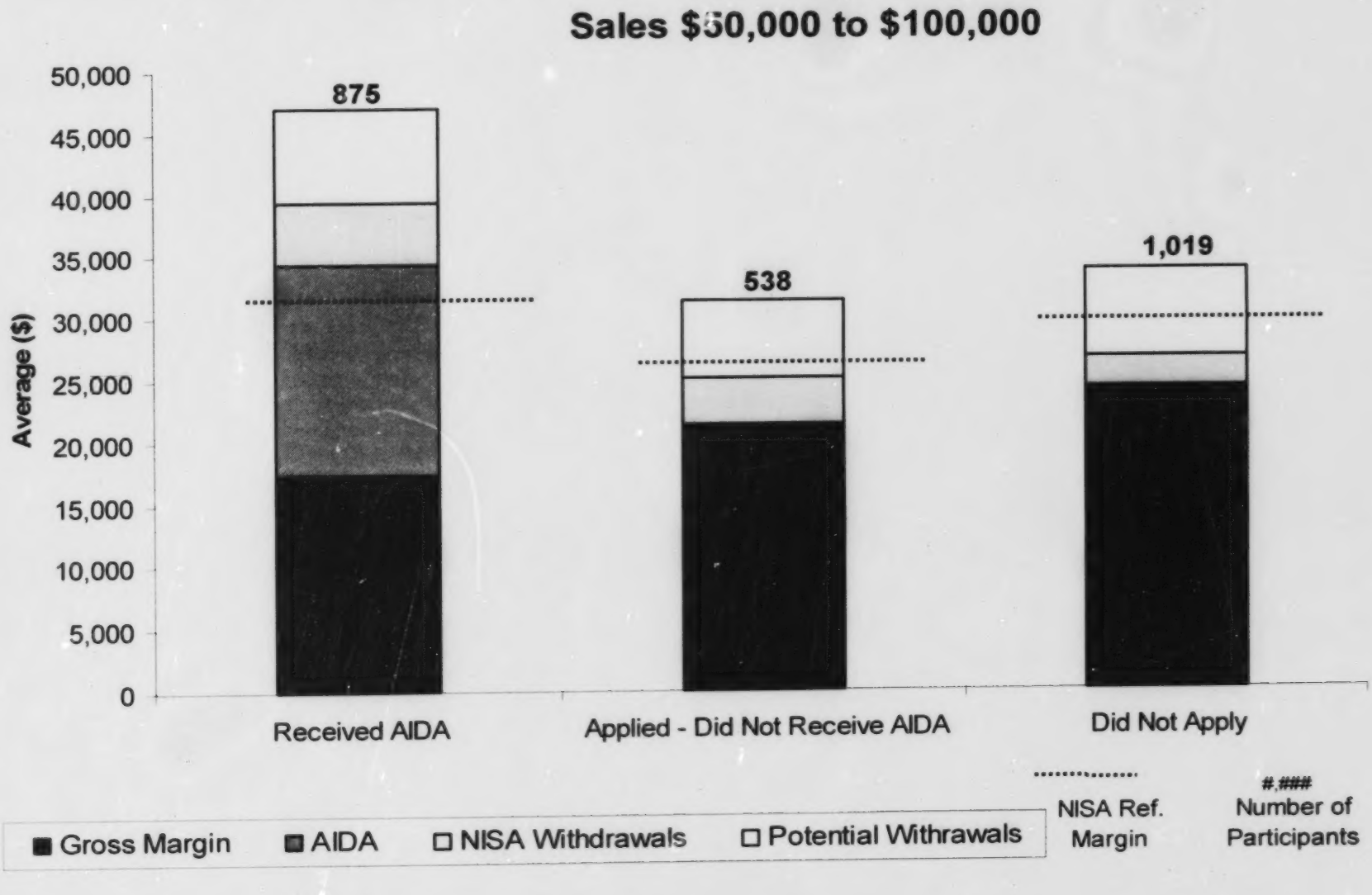


Figure 3.16

Net Cash Income (After CCA), Grains & Oilseeds, Saskatchewan

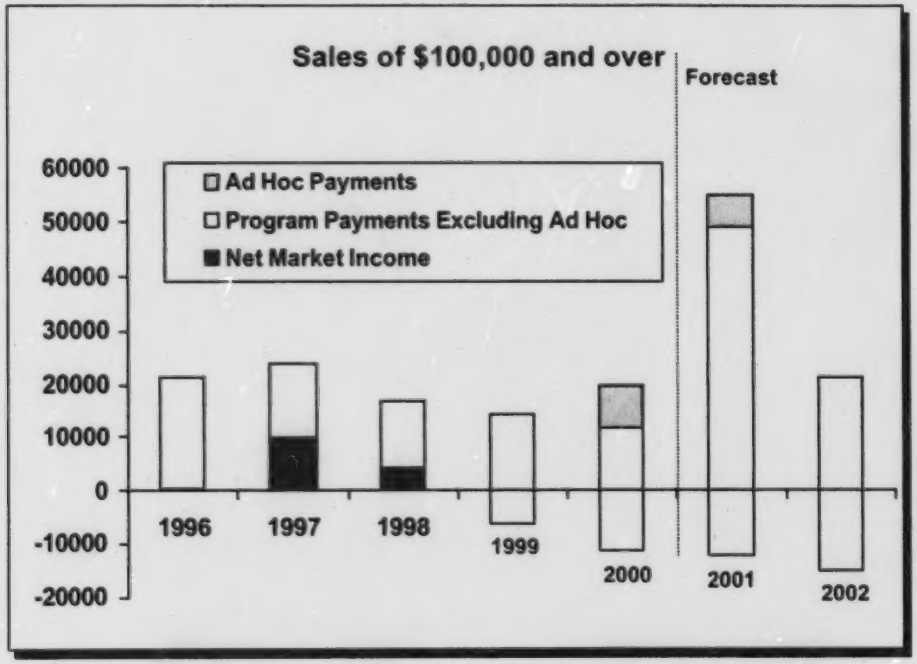


Figure 3.17

Impact of safety nets for grain & oilseed farms in Saskatchewan, stabilization year, 1999

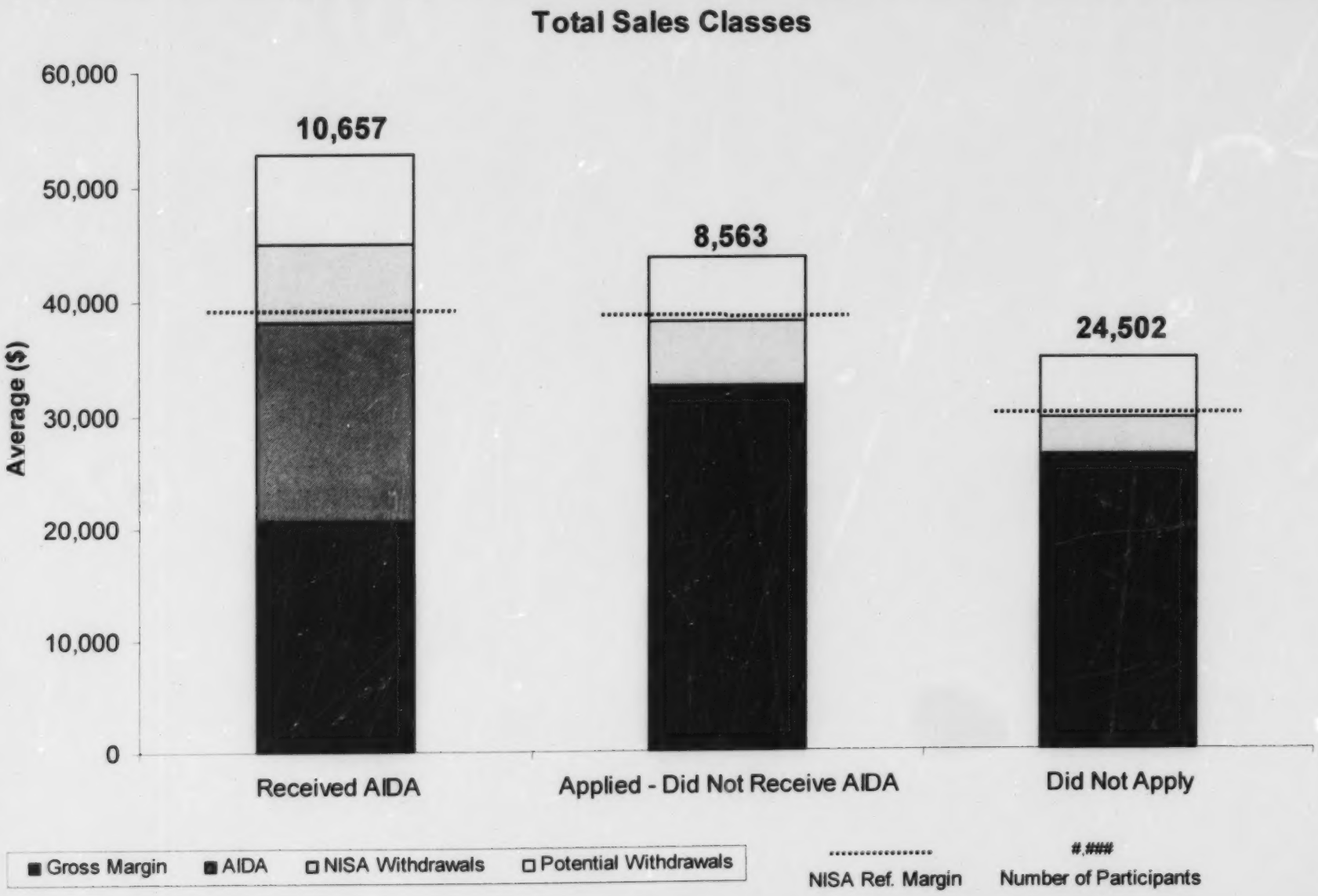


Figure 3.18

Net Cash Income (After CCA), Hog Farms, Ontario

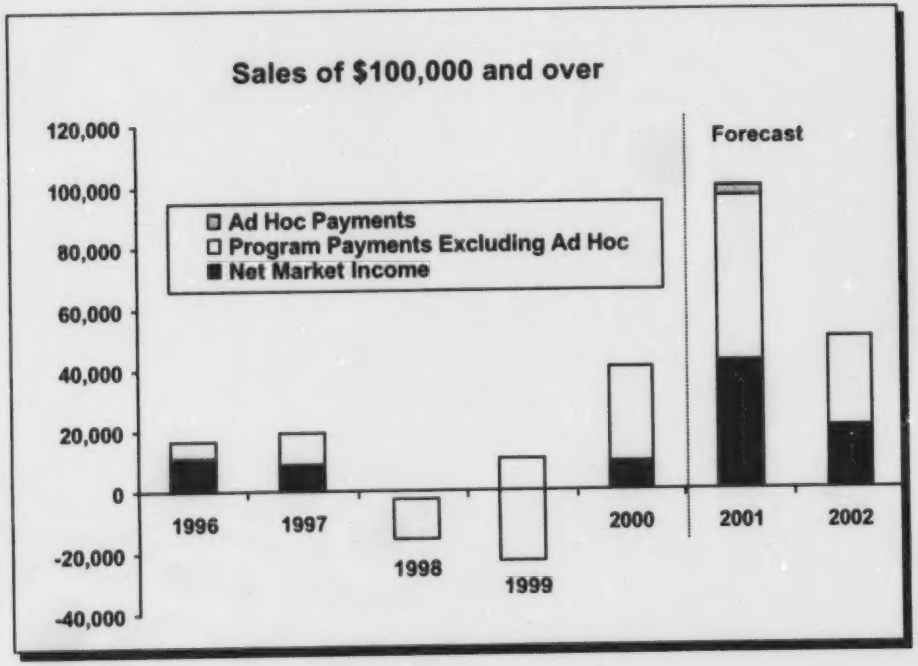


Figure 3.19

Net Cash Income (After CCA), Fruit and Vegetable, British Columbia

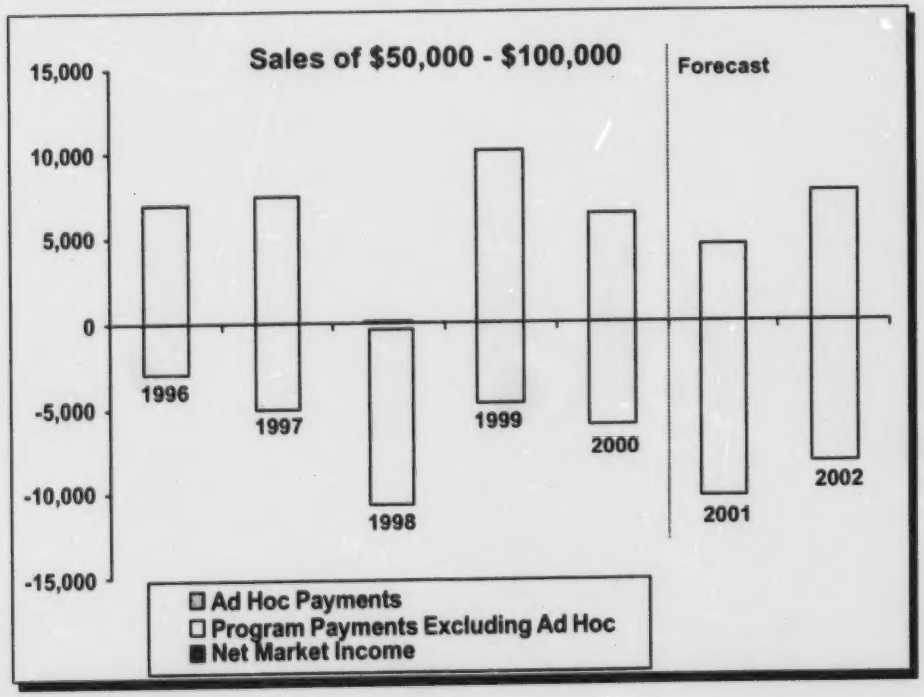
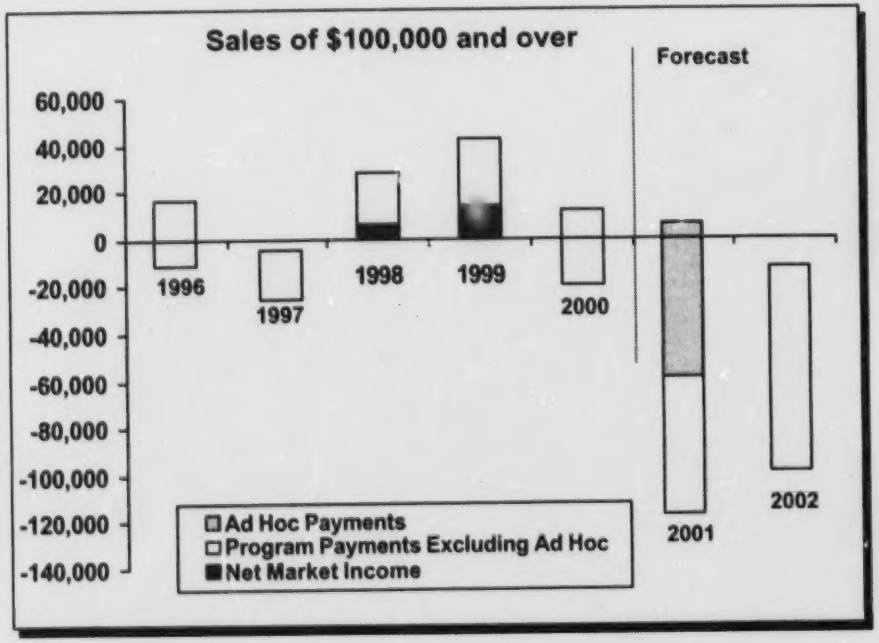


Figure 3.20

Net Cash Income (After CCA), Potato, Prince Edward Island



NISA Account Balances for Potato Farms in Prince Edward Island

- 23% of large potato farms in PEI have inadequate NISA accounts
  - Their accounts average $22,501, or less than 10% of their five year margin on average - they cannot handle further low margins unless they have other sources of income
  - The other 77% have the equivalent of 100% of their margins on average in NISA or close to $128,000 - they can handle several more years of below average margins
- 21% of medium sized potato farms in PEI have inadequate NISA accounts
  - Their accounts average $4,787, or about 11% of their five year margin on average - they too cannot handle further low margins unless they have other sources of income
  - The other 79% have the equivalent of 100% of their margins on average in their NISA accounts - they can handle several more years of below average margins

NISA account balance as a % of five year average gross margin for Potato farms in Prince Edward Island, by farm size, stabilization year 1999

	Less than 30%		Greater than 30%		Total	
Sales Class	#	Avg. Balance	#	Avg. Balance	#	Avg. Balance
Less than $10,000	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
$10,000 to $50,000	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
$50,000 to $100,000	8	$4,787	30	$33,123	38	$27,157
$100,000 and over	75	$22,501	259	$127,676	334	$104,059
Total	92	$18,848	313	$110,212	405	$89,458

NISA Account Balances for All Farms in Canada

- 39% of large farms in Canada have inadequate NISA accounts
  - Their accounts average $8,427, or less than 10% of their five year margin on average - they cannot handle further low margins unless they have other sources of income
  - The other 61% have the equivalent of 100% of their margins on average in NISA or close to $76,000 - they can handle several more years of below average margins
- 39% of medium sized farms in Canada have inadequate NISA accounts
  - Their accounts average $2,702, or less than 10% of their five year margin on average - they too cannot handle further low margins unless they have other sources of income
  - The other 61% have the equivalent of 100% of their margins on average in their NISA accounts - they can handle several more years of below average margins

NISA account balance as a % of five year average gross margin for All farms in Canada, by farm size, stabilization year 1999

	Less than 30%		Greater than 30%		Total	
Sales Class	#	Avg. Balance	#	Avg. Balance	#	Avg. Balance
Less than $10,000	5,335	$811	6,485	$9,584	11,820	$5,624
$10,000 to $50,000	16,359	$1,433	25,421	$16,276	41,780	$10,464
$50,000 to $100,000	10,998	$2,702	17,100	$29,996	28,098	$19,313
$100,000 and over	16,710	$8,427	25,766	$76,140	42,476	$49,501
Total	49,402	$4,014	74,772	$39,462	124,174	$25,359

NISA Account Balances for Hog Farms in Ontario

- 50% of large hog farms in Ontario have inadequate NISA accounts
  - Their accounts average $7,452, or less than 10% of their five year margin on average - they cannot handle further low margins unless they have other sources of income
  - The other 50% have the equivalent of 100% of their margins on average in NISA or close to $50,000 - they can handle several more years of below average margins
- 45% of medium sized hog farms in Ontario have inadequate NISA accounts
  - Their accounts average $1,885, or less than 10% of their five year margin on average - they too cannot handle further low margins unless they have other sources of income
  - The other 55% have the equivalent of 100% of their margins on average in their NISA accounts - they can handle several more years of below average margins

NISA account balance as a % of five year average gross margin for Hog farms in Ontario, by farm size, stabilization year 1999

	Less than 30%		Greater than 30%		Total	
Sales Class	#	Avg. Balance	#	Avg. Balance	#	Avg. Balance
Less than $10,000	34	$346	17	$11,914	51	$4,202
$10,000 to $50,000	144	$1,270	177	$12,721	321	$7,584
$50,000 to $100,000	170	$1,885	211	$22,617	381	$13,367
$100,000 and over	600	$7,452	605	$50,234	1,205	$28,932
Total	948	$5,260	1,010	$37,246	1,958	$21,759

NISA Account Balances for Cattle Farms in Alberta

- 59% of large cattle farms have inadequate NISA accounts
  - Their accounts average $6,113, or less than 10% of their five year margin on average - they cannot handle further low margins unless they have other sources of income
  - The other 41% have the equivalent of 100% of their margins on average in NISA or close to $37,000 - they can handle several more years of below average margins
- 59% of medium sized cattle farms have inadequate NISA accounts
  - Their accounts average $2,696, or less than 10% of their five year margin on average - they too cannot handle further low margins unless they have other sources of income
  - The other 41% have the equivalent of 100% of their margins on average in their NISA accounts - they can handle several more years of below average margins

NISA account balance as a % of five year average gross margin for Cattle farms in Alberta, by farm size, stabilization year 1999

	Less than 30%		Greater than 30%		Total	
Sales Class	#	Avg. Balance	#	Avg. Balance	#	Avg. Balance
Less than $10,000	96	$1,211	58	$8,322	154	$3,889
$10,000 to $50,000	826	$1,424	584	$10,018	1,410	$4,984
$50,000 to $100,000	899	$2,696	632	$15,941	1,531	$8,163
$100,000 and over	1,507	$6,113	1,052	$37,469	2,559	$19,003
Total	3,328	$3,885	2,326	$24,001	5,654	$12,160

CHAPTER 4: SAFETY NET FUNDING ARRANGEMENTS

The funding arrangements to safety net programs are determined in accordance with the Federal-Provincial Framework Agreement on Agricultural Risk Management. The Agreement outlines the maximum amount of funding that the federal government will provide for eligible safety net programs across Canada and the method that the funding will be distributed amongst provinces. It also includes the amount of funding that provinces must provide to be eligible for the federal funds.

The practice of having an allocation to provinces and an overall cost-sharing requirement began in 1995/96 with the first Framework Agreement. The allocation was introduced as a means to providing a more stable policy environment where funding levels were known in advance and provinces had some flexibility in providing programs based on their own priorities. To achieve a common objective across the country, a common set of principles has been part of both Framework Agreements.

4.1 The Current Framework Agreement

Federal Funding

The annual federal funding provided is approximately $1.1 billion and is broken down into two components. The funding under Part One is $665 million plus what is needed to maintain Saskatchewan, Manitoba and New Brunswick at their 1998/99 federal funding levels (about $42 million). The $665 million is first allocated to Newfoundland ($2.35 million) and Yukon ($0.208 million for 2001-02 and 2002-03) and the remaining is allocated to each province as this:

- 50% on the basis of their respective share of farm cash receipts for non-supply managed commodities.
- and the other 50 % on the basis of their respective shares of market receipts for non-supply managed commodities.

Provincial allocation for the three years of the current agreement is presented in Table 4.1.

The funding under Part Two is $435 million. The federal cost of the Spring Cash Advance Program is first deducted from the $435 million and the remaining funds are used to fund the Canadian Farm Income Program (CFIP). CFIP is funded on a demand-driven basis in accordance with common program criteria and is subject to proration.

In the course of the agreement, a special assistance of $500 million was provided to farmers in the fiscal year 2001-02, specifically for expenditures relating to economic hardship experienced in the year 2000. Provincial allocation is based on the same methodology as for the $665 million and is presented in Table 4.2.

Table 4.1: Provincial allocation of federal funding for Part one of the Current Framework Agreement on Agricultural Risk Management (in thousands of dollars)*

	2000/01	2001/02 (forecast)**	2002/03 (forecast)**
British Columbia	32,334	32,921	33,890
Alberta	168,333	168,358	168,827
Saskatchewan	195,200	195,200	195,200
Manitoba	75,600	75,600	75,600
Ontario	138,197	138,548	139,997
Quebec	74,502	75,590	77,215
New Brunswick	5,617	5,839	6,006
Nova Scotia	5,744	5,858	5,986
Prince-Edward-Island	7,227	7,170	6,937
Newfoundland	2,350	2,350	2,350
Yukon***		208	208

* Includes the additional amount to maintain Manitoba and Saskatchewan at their 1998/99 level of funding. New Brunswick has not required any additional amount to maintain its 1998/99 funding level.
** As of January 2002.
*** Started to be part of the framework agreement in 2001/02.

Table 4.2: Provincial allocation of the special assistance under the Current Framework Agreement on Agricultural Risk Management (in thousands of dollars)

	2001/02
British Columbia	24,300
Alberta	126,800
Saskatchewan	118,500
Manitoba	55,200
Ontario	104,100
Quebec	56,100
New Brunswick	4,200
Nova Scotia	4,300
Prince-Edward-Island	5,400
Newfoundland	1,000
Canada	500,000

Federal Expenditures

Current federal/provincial safety net programs that are available in every province are the Net Income Stabilization Account (NISA), Crop Insurance, Fall cash advances, Spring cash advances and CFIP. Companion programs include, whole-farm type programs (e.g. NISA enhancements, Self-Directed Risk Management (SDRM)), CFIP enhancements (e.g. negative margin insurance)), crop insurance type programs (e.g. wildlife compensation), other support programs (e.g. ASRA and Market Revenue Program) and research and development initiatives. Federal expenditures for these programs are shown in Table 4.3.

Table 4.3: Total Federal Expenditures for Risk Management Programs under the Current Framework Agreement (in millions of dollars)

	2000/01	2001/02 (forecast)*	2002/03 (forecast)*
Part One programs :			
- NISA	227	252	282
- Fall cash advance	31	26	25
- Province-based programs			
- Crop Insurance	223	233	237
- Whole Farm type	50	80	69
- Crop insurance type	25	9	2
- Other Support	102	137	86
- R&D	14	16	14
- Not allocated	0	0	20
Part Two programs :			
- Spring Cash Advances	12	25	30
- CFIP	341	360	260
Total Safety Nets	1,025	1,138	1,025

* As of January 2002

Source: Agriculture and Agri-food Canada

Cost-Sharing Requirements

Under the current and previous agreements, provinces have been required to provide a minimum of 40% cost-sharing in order to access the federal dollars. The federal government had insisted on this provision in the framework agreements in order to ensure some level of equitable support for farmers across the country and establish a shared responsibility to discipline provinces that had historically joined producer lobby efforts for more federal money. The 40% figure was derived from the fact that provinces paid a little less than 25% of the government cost of GRIP, a little more than 33% of the cost of NISA and 50% of crop insurance costs. Overall, it was estimated that 40% was roughly the current provincial share in most provinces.

For both Framework Agreements, cost-sharing arrangements have then been defined for the entire envelope and not at a program level in order to provide flexibility to the provinces in achieving their cost-sharing requirements. For the current framework agreement, the 40% cost-sharing requirement for a province is effective for each of the two Parts of the agreement (only for CFIP under Part Two) and also for the two Parts together.

Cost-sharing flexibility has also been provided, for the previous Framework Agreement and Part One of the current Framework Agreement, by having to meet the cost-sharing requirement over the three years of the agreement instead of on a year to year basis.

4.2 Issues for the Next Framework Agreement

Adequacy of Current Level of Federal Funding – Against needs

While the framework was only in its second year, there have been numerous pressures to provide additional funding. It is difficult to determine if these pressures are a result of funding levels being inadequate for industry's needs, program designs not meeting the industry's needs, a combination of the two or simply industry demanding more than government's deems is appropriate. As a result of these pressures, an additional ad-hoc federal funding of $500 million was provided in 2001/02 with 40% provincial cost-sharing requirement for a total assistance of $833 million.

Governments should consider whether the amounts provided for ad-hoc assistance should be anticipated and included in the framework or whether there are times when providing ad-hoc assistance is preferable to embedding the support as part of the framework funding.

Adequacy of Current Level of Federal Funding - Against International competitors

Canada's total support level (in percentage PSE) was about one half of the OECD average (19 versus 34) in 2000. The total support level was considerably higher in Japan and the EU, marginally higher in the US, and lower in Australia and New Zealand (Table 4.4).

The US provides significantly more support to grains and oilseeds and less support to other selected commodities. The EU provides more support to all selected commodities except milk. Australia and New Zealand's support levels for all selected commodities are lower than Canada's. Japan's levels of support are much higher in all commodities.

These relatively high levels of support by major competitors are a legitimate concern for Canadian farmers. However, there is an outstanding question as to what the appropriate response should be.

Table 4.4: Support by major competitors for selected commodities, 2000*

	Wheat	Corn	Barley	Oilseed	Milk	Beef	Pork	Total**
Canada (% PSE)	17	20	15	15	59	9	8	19
Major competing nations compared to Canada – as a % of Canada								
US	288	165	200	153	85	44	50	116
EU	253	180	280	280	73	833	313	200
Australia	35	N/C	27	20	27	44	38	32
New Zealand	0	0	0	N/C	0	11	25	5
Japan	506	N/C	567	407	137	356	725	337
Total OECD***	235	170	273	167	81	356	275	179

* Preliminary
** Includes all commodities
*** Include all OECD countries
N/C: Not Calculated

Source: OECD, Monitoring and Evaluation

Adequacy of Current Provincial Allocation Mechanism of Federal Funding for Part One

Provincial allocation mechanism of federal funding for Part one of the Framework Agreement has been a source a significant discussions before the signature of both Framework agreements. The mechanism under the current agreement is based on the size of the farm sector in each province which is calculated from farm cash receipts and market receipts.

When the federal government moved to an envelope approach to safety net funding in the mid-1990's, it was felt that some agreement was needed to allocate federal dollars across provinces. There was a concern that under programs like Crop Insurance and NISA where provinces have flexibility to make changes, the provinces could enhance the program and secure a greater share of federal funds. It was perceived that some kind of an agreement was needed to avoid this competition and provide the provinces with some certainty about the amount of federal dollars to which they would have access.

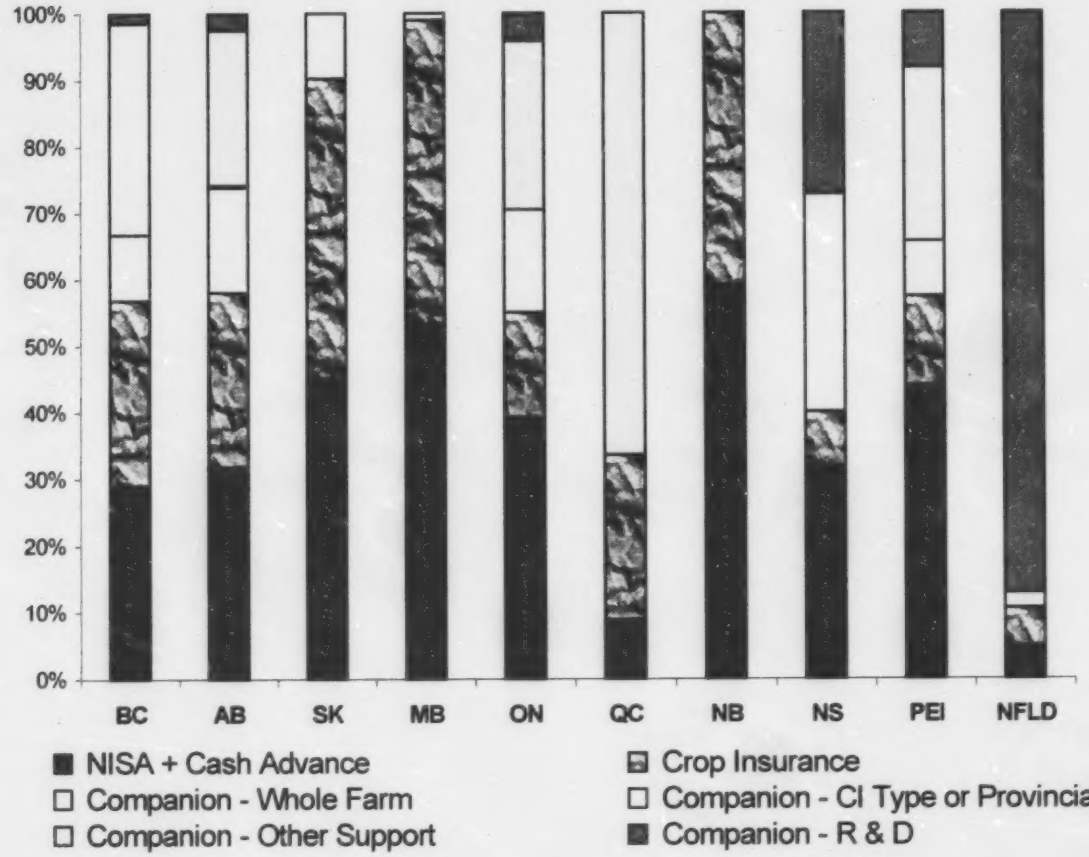
There have been concerns from some provinces about the level playing field of the current allocation mechanism. One of the main arguments is that they do not receive a fair share of the federal funding. Data that highlight their arguments are presented below as well as some positions/perceptions from other provinces about these arguments.

The ability to maintain, expand and develop programs. The ability of a province to maintain or expand program coverage or to use federal funds for other programs (support programs, R&D, etc.), is limited by the amount of federal funds remaining after covering the costs of the basic programs.

Figure 4.1 illustrates the financial contribution by the federal government in 2001/02 to each of the categories of programs that are funded under Part One of the framework agreement. Because some provinces spend most of their federal funding on basic NISA (3-2-1) and crop insurance, no funds are left for enhancing NISA or crop insurance, developing new province-specific programs or funding R&D programs. Moreover, there are provinces that do not spend all federal funding they have available in a specific year. These unused funds are reprofiled over the next three years.

Provinces that spend most of their funding on NISA and crop insurance argue that they are disadvantaged compared to other provinces and are then concerned about the current approach to allocate federal funding. They feel that other allocation mechanisms should be evaluated, including the option of having no provincial allocation of federal funds. Providing an allocation of funding to provinces that is not specifically determined by program demands results in designing programs in each province that will utilize the funding available. This contributes in variations in safety net support levels and coverage across the country, both within and across commodities.

Figure 4.1: 2001/02 Expenditures* for Risk Management Programs (Part 1), by Province



* Forecasts as of January 2002

Source: Agriculture and Agri-Food Canada

The coverages are illustrated in Table 4.5. It shows that Crop insurance premiums for G&O are cost-shared differently among provinces. Six of the provinces (all western provinces plus New Brunswick and Newfoundland) provide relatively more government funding to their crop insurance programs to lower the cost of crop insurance for producers in their province. Due to the higher degree of production risk in these provinces, the premium costs are higher. The added government subsidy reduces the producer's share of premiums to bring them closer to a similar level as other areas. The added support is accomplished by providing a higher percentage of subsidy for the disaster level (tier 1) of coverage. Four provinces (ON, QU, NS and PEI) provide a higher level of coverage; up to 90% compared to 80% provided in the other six.

Crop insurance for horticulture also varies among provinces. Level of coverage is identical in each province at 80% except for Ontario but benefits could be specific to provinces (e.g. potato variety insurance in New Brunswick and PEI). Moreover, Ontario is the only province to offer protection directed to crops not covered by crop insurance through the SDRM (self-directed risk management) program.

The protection offered by NISA is higher in Ontario, Nova Scotia and Newfoundland than in other provinces. Quebec offers NISA to horticulture commodities only. This province has started to deliver a NISA-like program but commodities under ASRA will be eligible from the 2002 stabilization year.

Ontario and Quebec use part of their federal allocation to fund commodity-specific price/cost-of-production protection programs. Moreover, some provinces partly fund other support programs such as Farm Income Assistance Program (FIAP) in Alberta and Assistance program in Saskatchewan. British Columbia, Nova Scotia and PEI offer deeper income disaster program coverage.

The results of the evaluation and the current policy direction should be used in considering whether a provincial allocation of funds is still the way to proceed and if so, how much of the funding should be based on an allocation and how much should be program demand driven.

Table 4.5: Summary of Safety Net Programs funded under Part One of Framework, by Commodity and Province (stabilization year 2000) - Excluding ad-hoc and disaster assistance

Grain and Oilseed Sector										
	BC	**AB**	**SK**	**MB**	**ON**	**QC**	**NB**	**NS**	**PEI**	**NF**
Crop Insurance:										
- Coverage: Tier 1 Tier 2 - Other benefits	60% 80% Hail	50% 60-80% Hail	50% 60-80% Hail	50% 70-80%	65-90%	60-90%	50% 65-80%	60%- 90%	70%- 90%	60%- 80%
-Tier 1 premium shares	0/100/0	20/40/40	20/40/40*	0/60/40	50/25/25	50/25/25	0/50/50	50/25/25	50/25/25	0/60/40
-Tier 2 premium shares	55/45/0	50/25/25	40/36/24	50/25/25			50/25/25 80/10/10			50/30/20
- Overall premium cost sharing	17/83/0	29/27/32 (12% from CI fund)	29/43/28	27/41/32	50/25/25	50/25/25	14/43/43	50/25/25	50/25/25	7/56/37
- Average Producer Premium (% of coverage)	1.0	4.1	3.4	2.6	2.8	3.0	1.1	2.4	3.7	0.9
- Average Coverage (%)	61	73	68	71	84	80	57	79	74	63
- Producer Admin Cost	$100 & $75 per crop	0	0	$0.20 per acre $50 min	0	0	0	0	0	0
NISA: Prod – Fed – Prov	3-2-1	3-3-0	3-2-1	3-2-1	4-2.5-1.5		3-2-1	4-3-1	3-2-1	5-3-2
Price Protection					MRP (85% coverage)	ASRA (COP)				
Other	Zero-out negative margin in CFIP	FIAP (portion)	Assistance Program (portion)					CFIP Negative Margin	CFIP Negative Margin	

* 1999 Stabilization Year

Cattle Sector										
	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NF
NISA: Prod - Fed – Prov	3-2-1	3-3-0	3-2-1	3-2-1	4-2.5-1.5		3-2-1	8-5.4-2.6	3-2-1	5-3-2
Other	Zero-out negative margin in CFIP					ASRA (COP)		CFIP Negative Margin	CFIP Negative Margin	

Hog Sector										
	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NF
NISA: Prod - Fed – Prov	3-2-1	3-3-0	3-2-1	3-2-1	4-2.5-1.5		3-2-1	8-5.4-2.6	3-2-1	5-3-2
Other	Zero-out neg. margin (CFIP) + Neg. Margin Insurance (pilot)					ASRA (COP)		CFIP Negative Margin	CFIP Negative Margin	

Horticulture Sector										
	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NF
Crop Insurance eligible commodities: - Coverage level - Other Benefits	80% Hail	80% Hail	80% Hail	80%	90%	80% Vegetable –single peril hail	80% Potato variety insurance	80%	80% Potato variety insurance	80%
Non Crop Insurance eligible commodities					SDRM (4-2-2)					
NISA: Prod – Fed – Prov	3-2-1	3-3-0	3-2-1	3-2-1	6-3.5-2.5	6-2-4	3-2-1	4-3-1	3-2-1	5-3-2
Other	Zero-out neg. margin (CFIP) + Neg. margin insurance (pilot)	FIAP (portion)			Assistance for Plum Pox			CFIP Negative Margin	CFIP Negative Margin + Potato disposal	

The relative level of subsidy provided. An argument is that federal allocation under Part One should consider benefits received by other sectors from the federal government. These benefits can be evaluated through federal transfers and are presented in Table 4.6 for each province and specific commodities.

Table 4.6: Federal Transfers (Direct, Indirect and Regulatory), by commodity, 1999-00 (% AVOP)

	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NF	Can
G&O	2.0	2.6	4.2	4.2	6.8	10.2	1.8	5.5	4.4	0	4.6
Red Meats	2.7	2.5	4.5	3.2	4.5	8.2	2.3	3.2	3.6	3.2	4.2
Horticulture	7.0	4.2	7.3	5	9.2	7.5	4.6	7.1	5.0	8.3	6.9
Supply management	16.3	13.9	18.6	21.2	19.5	18.6	22.8	17.3	23.1	12.0	18.4
Total*	9.7	4.0	5.8	5.8	10.9	11.8	10.8	10.3	7.4	10.6	7.8

AVOP: Adjusted value of production
* Include other commodities than the above.

Note: Some subsidies that are difficult to trace to a commodity are recorded to a commodity based on the commodity's composition in an area. The most recent data available is based on 1999-00, which is prior to the current framework. This data should still be relevant, as the programs in place during the framework are very similar to those in place in 1999-00

Source: Agriculture and Agri-food Canada

Based on federal transfers, total federal support was considerably higher outside the Prairie provinces. Supply managed commodities received considerable more federal support than other commodities. Grains and Oilseeds received the most federal support in Quebec and least in New Brunswick. Red meats received most federal support in Quebec and least in New Brunswick. Horticulture producers received the most federal support in Ontario and least in Alberta. Supply managed producers received the most federal support in PEI and least in Alberta.

In determining the level of the provincial allocation for federal funding under Part One of the Framework Agreement, some very significant commodities, being dairy, poultry and eggs were excluded. These commodities receive support through the benefits of supply management regulations. It is argued that all commodities and support should be included to calculate the provincial allocation under Part One of the Framework Agreement.

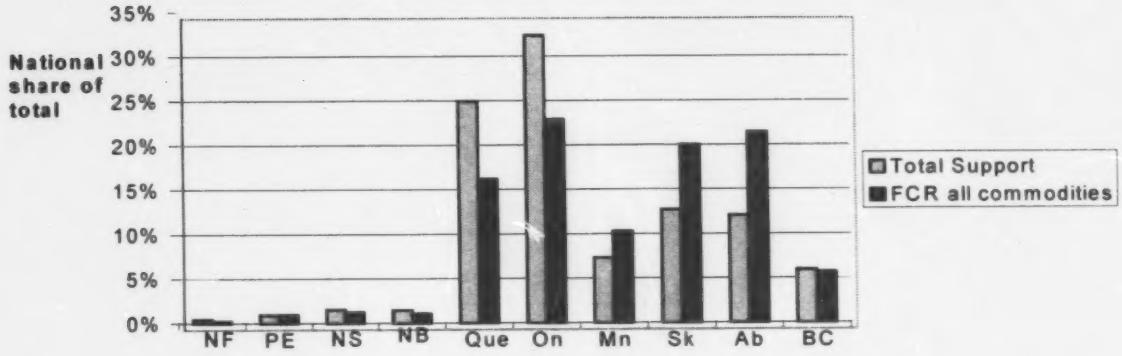
Another approach of benefits is presented in Figure 2. It shows the total support (direct and regulatory) received by each province and the distribution of Farm Cash Receipts (FCR)[1]. If

[1] It should be noted that the sales are based on the market sales, which are higher due to the regulatory benefits. If the benefits factor was removed, the proportion of FCR would be lower in provinces with the higher proportion of supply managed commodities. The table is based on pre-framework levels of support and FCR. The support would likely be higher in those provinces that now receive a higher proportional share of funding under the new framework.

distributing total support in proportion to size were the preferred method of allocating safety net funds, then either the allocation would need to be increased in the Prairie provinces or reduced/reallocated from the non-prairie provinces.

A counter-argument to considering all commodities and all or more benefits in the calculation of provincial allocation for Part One of the Framework Agreement is that the Framework Agreement provides support to non-supply managed commodities and consequently support provided to supply-managed commodities should not be included in any calculation.

Figure 4.2: Provinces' Shares of Federal Support and Sales (Direct and regulatory), 1997



The matching of funding and use of funding by commodity. Part One of the safety net funds is allocated to provide provinces with funding in proportion to their total agricultural size. Under such an allocation mechanism, some commodities could attract proportionally more federal support to the province than they receive. The province could then expand coverage to these commodities or spend more federal money to other commodities. It is argued that it could contribute to different levels of safety net coverage for the same commodities across provinces.

To verify this, it would be ideal to look at Part One federal funding in proportion to each commodity type within a province. However, this requires a breakdown of program costs that is not available. Instead, the total of program payments to commodity type is reviewed as this will show if sales and total program payments are directly proportional. To evaluate if sales is representative of how funds are expended, the percentage of the total program assistance that a sector receives within a province is compared with that sector's share of sales in the province (e.g. the amount of funds it draws).

The ratio of program payments to sales varies significantly within and among commodities and provinces (Table 4.7). In most provinces, grain and oilseed sales attracted a lower proportion of federal safety net funds to the province than required to fund grain and oilseed programs. Cattle sales in most provinces attracted a higher portion of federal safety net funds to the province than is required to fund its program payments. Hog sales drew a lower proportion of federal safety net funds to the province than required to fund its program payments in all provinces except Manitoba and Saskatchewan. Horticulture farms attracted significantly more federal funds to the province than they received in all provinces, except BC.

Table 4.7: Ratio* of program payments in a province to proportion of Province's sales (1999)

	BC	AB	SK	MB	ON	QC	ATL
G&O	0.79	1.79	1.15	1.34	1.91	1.87	3.00
Cattle	0.38	0.54	0.63	0.89	0.93	1.58	1.31
Hogs	2.95	2.09	0.46	0.95	2.83	1.94	3.58
Horticulture	1.70	0.70	--	0.14	0.31	0.39	0.81

* A ratio of 1.0 means that the program payments to a sector are in proportion with the allocation (sector's size).

Source: AAFC FDA Section internal estimates based on 2000 Farm Financial Survey Section 4, Farm Safety Net Review Data Book

It can be concluded that the allocation of funds to a commodity is overall not proportional to the use of the funds by this commodity and that, in each province. From these results, it can be argued that the current allocation mechanism does not respond adequately to needs as it places an equal weighting of support for all commodities and create distortions among provinces.

However, it can also be argued that the allocation mechanism was not intended to respond to all needs and should then not only be evaluated against this objective of meeting needs.

The adequacy of provincial allocation of federal funding under Part one turns around the concept of equity. Should a province with higher risk for crop insurance receive higher funding from the federal government? Should funding be related to needs? Should all federal support be included when defining the level of support a province should receive for safety nets? There is no straightforward answer to these questions. Options for discussion, along with estimates of provincial shares, are provided in the next section.

Adequacy of funding mechanisms for the Income Disaster Program

Part Two funding of the Framework Agreement is $435 million per year and is about 40% of the total framework federal funding available. With the exception of a relatively small amount (about $25 million per year) that is set aside to fund Spring cash advances, Part Two funds are used strictly to pay the federal share of CFIP for 2000 to 2002 claim years. Unlike Part One, this funding is delivered on a demand-driven basis up to $435 million and there are no provisions for rolling forward funds if the demand in a year is less than the funding limit. If demand exceeds the limit, payments are prorated to the equal the funding limit.

Unlike an insurance-based program, the annual funding determines total for payments in the claim year. If governments were to look at providing adequate funding to cover the full amount of claims triggered then either the amount of funding available in a disaster year may need to increase or a budgeting practice of setting aside funds could be implemented until a targeted balance is reached. This approach would require additional analysis to determine the appropriate balance or the potential liability in a year.

The current method of capping funding in the year limits the government's liability and in some ways makes it easier for government's to budget for the program. As the amount of funding is very volatile, it requires initial payments levels to be prorated at a conservative level which impacts on the program ability to make timely payments. It also presents significant pressures and tests the willingness of governments to maintain the limit if claims are not fully paid during difficult times.

Adequacy of Current Cost-Sharing Requirements

The government treasuries, funded by taxpayers, provide the funding for the direct and indirect expenditures, whereas the consumer of supply managed commodities pays for regulatory support. The provincial government capacity to fund regulatory support will not vary significantly among provinces. However, the provincial government capacity to fund expenditures can vary significantly depending on the tax base relative to the size of the agricultural industry in a province.

Taxpayers in provinces where agriculture is a higher proportion of their GDP take on a greater burden in funding agricultural programs. For funding under Part one of the Framework Agreement, the average provincial funding requirement is $15 per capita (Table 4.8). Four provinces are significantly above this average, being PEI at $35, Alberta at $37, Manitoba at $44 and Saskatchewan at $127 per capita. Cost-sharing requirements in terms of GDP (based on 2000/01 GDP) are well above the provincial averages of .05% for the same four provinces, ranging from 0.09% in Alberta to 0.45% in Saskatchewan. The federal cost is $23 per capita and the federal cost-sharing requirement is 0.08% of GDP.

The funding under Part Two of the envelope, which also requires 60:40 cost-sharing, fluctuates based on program demand. The relative level of burden between governments is essentially the same as under Part One. The burden can increase significantly when disasters occur. For example, the cost increased by $38 per capita in Saskatchewan from 1998 to 1999 whereas the average provincial cost only increased by $3 and the federal cost increased by $5.

Table 4.8: Provincial Cost-sharing Requirements as a Percentage of GDP and per Capita, by Province

	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NF	All Prov	Can
Part One												
% of GDP	0.02	0.09	0.45	0.17	0.02	0.03	0.02	0.02	0.16	0.01	0.05	0.08
Per Capita	5	37	127	44	8	7	5	4	35	3	15	23
1998 AIDA												
% of GDP	0.01	0.05	0.23	0.09	0.01	0.04	0.00	0.01	0.07	0.00	0.03	0.05
Per Capita	2	17	58	20	3	9	0	3	14	0	8	12
1999 AIDA												
% of GDP	0.00	0.04	0.36	0.21	0.01	0.05	0.00	0.01	0.09	0.00	0.04	0.06
Per Capita	1	13	95	49	4	12	1	2	17	0	11	17
Change for 1999 vs. 1998												
% of GDP	0.00	-0.02	0.13	0.12	0.00	0.01	0.00	-0.01	0.01	0.00	0.01	0.02
Per Capita	0	-4	38	30	1	3	0	-1	3	0	3	5

Source: Agriculture and Agri-Food Canada, administrative data.
Statistics Canada

It has been argued that this differential provincial burden on taxpayers is detrimental to provinces with higher burden, mainly Saskatchewan and Manitoba. This position is however not shared by all provinces and it is counter-argued that it should be expected, in provinces where agriculture represents a higher proportion of the provincial economy, that safety net expenditures will be a higher burden on taxpayers.

Moreover, because the 40% provincial cost-sharing requirement may be difficult to reach for some provinces, some provinces want to avoid spending more than their 40%. But it is felt that reaching an exact 60:40 is virtually impossible to achieve. It could result in the province having to exceed 40% within each framework agreement in order to ensure their cost-sharing requirement is met to avoid producers face losing their share of federal funds.

4.3 Options for Funding Arrangements for the Next Framework Agreement

Provincial Allocation of Federal Funding

There is a wide range of possible outcomes for how federal dollars could flow under a new Framework Agreement. The selection of a specific approach may be influenced by the overall policy and program outcome. For example, if there is not a national disaster assistance program under the new framework, then it makes little sense to divide federal dollars into two boxes. Some of the broad options could be:

- Adopting the sharing formula from the first framework agreement for the non-disaster funds, no change for disaster funding;
- Sharing the non-disaster funds on the basis of the historical provincial shares of non-supply managed market receipts, no change for disaster funds;
- Eliminate the two box approach and divide all federal safety net dollars on the basis of non-supply managed market receipts; and
- Disentangle federal and provincial programming so that the federal government pays 100% of the cost for some programs, while the provinces cover the full cost of others.

1. *Original Framework Agreement:* Under the original framework agreement, the federal cost of basic NISA and Cash Advances were taken "off the top", then an allocation of $180 million was divided on the basis of historical crop insurance program costs. Finally, any remaining dollars were divided on the basis of provincial shares of non-supply managed cash receipts. Table 4.9a and 4.9b indicate the implications of this approach relative to the current agreement. Saskatchewan, Manitoba would get a larger share of the total, for New Brunswick the increase would be modest, while all other provinces (except Newfoundland and Yukon) would receive fewer federal dollars.

2. *Share of Non-Supply Managed Market Receipts:* Under the current framework a compromise was reached whereby the sharing formula was based on 50% market receipts and 50% cash receipts (includes program payments). Some provinces viewed this as a transition towards basing the allocation on 100% market receipts. Assuming a $665 million box one funding (less $2.35 million for Newfoundland and $0.208 million for Yukon), Table 4.10a attached indicates the implications of moving to this model from the current arrangement. Overall, there is little change. Saskatchewan and Quebec would receive slightly less federal dollars, while other provinces would secure slightly more federal dollars (no change for Newfoundland and Yukon).

   Table 4.10b also indicates the implications of moving to this model from the current arrangement. In the current agreement, we have provision for keeping federal allocation for Saskatchewan and Manitoba at 1998/99 level. Under this proposed model, Saskatchewan would receive significant fewer federal dollars compared to the current arrangement; Manitoba and Quebec will receive slightly less, while other provinces would secure slightly more federal dollars (no change for Newfoundland and Yukon).

3. *Share all Federal Safety Net Dollars on a Share of Market Receipts Basis:* Under this approach, the two box system would be eliminated and the full federal funding would be divided between the provinces on the basis of non-supply managed market receipts. It is very difficult to compare the implications of this approach with the current arrangement since the allocation of Part Two will vary from year to year. The table below uses an average of the 1998 and 1999 AIDA program costs (excluding negative margins) to divide $435 million in federal dollars. Assuming a total of $1.1 billion (less $3.4million for Newfoundland and $0.208 million for Yukon), Table 4.11a provides a rough estimate of the implications of moving to this model from the current arrangement. This analysis suggests that Quebec, Saskatchewan and Manitoba would get fewer dollars, while all other provinces would receive more.

Table 4.11b also indicates the implications of moving to this model from the current arrangement. In the current agreement, we have provision for keeping federal allocation for Saskatchewan and Manitoba at 1998/99 level. Under this proposed model compared with the current framework, Saskatchewan, Manitoba and Quebec would receive significant fewer federal dollars while other provinces would secure more federal dollars (no change for Newfoundland and Yukon).

4. *Federal-Provincial Disentaglement:* Under this approach there would be no need for a sharing formula for the distribution of federal dollars. Instead federal dollars would be spent on the basis of nationally consistent federal-only programs and the provinces would be responsible for any other programs. In this example, the federal government would cover the cost of Cash Advances, Base NISA and CFIP. The provinces would cover the full cost of Crop Insurance and any other provincial programs (e.g. NISA top-ups, SDRM, R&D Funds). Under the current program rules, Table 4.12a provides a rough estimate of the federal and provincial costs in each province. Table 4.12b and 4.12c compares the allocation of federal dollars relative to an estimate of the distribution of the current $1.1 billion. This table indicates that Quebec, Manitoba and Saskatchewan would receive more federal dollars relative to the current situation, while other provinces would receive less.

These four options are not exclusive and should be viewed as a starting point to define the allocation mechanism for the next agreement. The current allocation formula should also be part of the list of options as well as any other options that may be brought during the process of program evaluation. Other options could be:

- Provide one part of an allocation for income stabilization and a separate part for impacts of international subsidy disparities
- Fund programs directly (cost shared or not) and not have an allocation
- Fund some programs directly, provide an allocation based on the impact of international subsidy disparities

Cost-Sharing Requirements

When moving to a broader framework including environment, food safety, renewal and science, a question arises about the need for provincial cost-sharing/contributions to meet a national objective. There are a number of options for the next framework agreement. If the federal-provincial disentanglement option is selected, there may not be a need for a minimum 40% share. Instead, the rule would be that the province must deliver an effective Crop Insurance program meeting some minimum requirements.

If some variation on options one, two or three is adopted, then the provinces would likely be asked by the federal government to continue to need to meet a minimum requirement. For example, the federal government could ask the provinces to provide 40% cost-sharing for safety nets and negotiate the other areas as appropriate. Alternatively a cost-sharing formula for safety nets could be developed to recognize the burden on provinces with a large agricultural base relative to their population. One option would be to require provincial cost sharing at 40% up to a predetermined per capita threshold. While it is likely that the provinces will have a role to play in each of the elements of the Agricultural Policy Framework, it is not clear that the 40% rule in safety nets would make sense in the other areas. As such, the provincial role and contribution in these other areas would be negotiated separately. Negotiating agreements in each of the areas would be difficult and time consuming, but it would ensure that the provinces are providing an appropriate level of contribution to each element of the framework.

Alternatively, the federal government may ask the provinces to provide some minimum contribution to the Agricultural Policy Framework, but allow flexibility to decide where to spend provincial resources. This approach would place provinces under an obligation to make a significant contribution to the overall Framework, but would give the provinces the flexibility to meet the objectives as they see fit. A concern with this more flexible approach is that some provinces may elect to make little or no contribution in some areas. This could reduce the effectiveness of the overall Agricultural Policy Framework approach.

In the next framework agreement, the provinces will be looking for some protection against being forced to increase spending in response to a unilateral federal decision. After the experience of spring 2001, combined with the tightened fiscal situation, it may be very difficult for provinces to respond to a federal decision that would require increased provincial spending. Increased protection for provinces could include the addition of a provision in the next framework requiring:

- prior approval of affected provinces before changing the framework in a way that creates a significant fiscal impact on the province; or
- a reasonable notice period (e.g. at least one year) to allow time to adjust.

4.4 Summary

Funding arrangements are part of the Framework Agreement on Agricultural Risk Management and define the level of federal funding, the provincial allocation of federal funding, if any, and the provincial cost-sharing requirements. A number of issues related to these arrangements have been raised and were presented in this report. Some of these issues are common to all provinces such as the relatively lower level of safety net funding in Canada compared to U.S. and E.U. There are also issues more specific to some provinces. For example, the current provincial allocation of federal funding is a particular concern for Manitoba and Saskatchewan.

Safety net funding varies across provinces and commodities. This variation is related to the current allocation formula. Options for changing the provincial allocation of federal funding were presented as well as considerations for cost-sharing requirements for the next Framework Agreement. There are significant outstanding issues relating to funding allocation and cost-sharing, both specific to safety net programs and to the APF more broadly.

Table 4.9a: Proposed Federal Funding Model for the $665 million: Using Allocation Formula of the Previous Agreement, Fiscal 2002/03 (For the current agreement, additional funding to maintain Manitoba and Saskatchewan at their 98/99 levels is excluded)

Province	Current Framework Agreement Base $665 M (Newfoundland $2.35 M) (Yukon $0.208 M) (Remainder 50:50 FCR/MR) [1]	Proposed Model on Allocation Formula Base $665 M (Newfoundland $2.35 M) (Yukon $0.208 M) (Previous formula) [2]	Difference (Proposed Formula VS Current Formula)
	($ millions)	($ millions)	($ millions)
Yukon	0.2	0.2	$0.0
Newfoundland	2.4	2.4	$0.0
Prince Edward Island	7.0	5.6	($1.4)
Nova Scotia	6.0	3.9	($2.1)
New Brunswick	6.0	6.2	$0.2
Quebec	77.2	63.6	($13.6)
Ontario	140.0	115.0	($25)
Manitoba	73.8	84.4	$10.6
Saskatchewan	149.7	209.6	$59.9
Alberta	168.8	153.5	($15.3)
British Columbia	33.9	20.6	($13.3)
Canada	665.0	665.0	$0.0

Note: Numbers in the parentheses imply reduction in federal funding under the proposed formula compared with the current formula.

[1] Based on 5-year (96-00) rolling averages of farm cash receipts and market receipts shares for non-supply managed commodities.

[2] The federal cost of base NISA and Cash Advances is taken "off the top", then $180 M for Crop Insurance is divided on the basis of the historical crop insurance expenditure, and remaining dollars are divided on the basis of provincial shares of 5-year (96-00) average farm cash receipts. The Quebec NISA equivalent payment was estimated at $20M.

Table 4.9b: Proposed Federal Funding Model for the $665 million: Using Allocation Formula of the Previous Agreement, Fiscal 2002/03 (For the current agreement, additional funding to maintain Manitoba and Saskatchewan at their 98/99 levels is included)

Province	Current Framework Agreement Base $665 M (Newfoundland $2.35 M) (Yukon $0.208 M) (Remainder 50:50 FCR/MR) [1] Man/Sask at 98/99 Levels	Proposed Model on Allocation Formula Base $665 M (Newfoundland $2.35 M) (Yukon $0.208 M) (Previous formula) [2]	Difference (Proposed Formula VS Current Formula)
	($ millions)	($ millions)	($ millions)
Yukon	0.2	0.2	$0.0
Newfoundland	2.4	2.4	$0.0
Prince Edward Island	7.0	5.6	($1.4)
Nova Scotia	6.0	3.9	($2.1)
New Brunswick	6.0	6.2	$0.2
Quebec	77.2	63.6	($13.6)
Ontario	140.0	115.0	($25)
Manitoba	75.6	84.4	$8.8
Saskatchewan	195.2	209.6	$14.4
Alberta	168.8	153.5	($15.3)
British Columbia	33.9	20.6	($13.3)
Canada	712.3	665.0	($47.3)

Note: Numbers in the parentheses imply reduction in federal funding under the proposed formula compared with the current formula.

[1] Allocating $665 M based on 5-year (96-00) rolling averages of farm cash receipts and market receipts shares for non-supply managed commodities and keeping Manitoba and Saskatchewan at the 1998/99 level.

[2] The federal cost of base NISA and Cash Advances is taken "off the top", $180 M for Crop Insurance and is divided on the basis of the historical crop insurance expenditure, and remaining dollars are divided on the basis of provincial shares of 5-year (96-00) average farm cash receipts. The Quebec NISA equivalent payment was estimated at $20M.

Table 4.10a: Proposed Federal Funding Model for the $665 million: Allocation Based on 100% Market Receipts (MR) (For the current agreement, additional funding to maintain Manitoba and Saskatchewan at their 98/99 levels is excluded)

Province	Current Framework Agreement Base $665 M (Newfoundland $2.35 M) (Yukon $0.208 M) (Remainder 50:50 FCR/MR) [1]	Proposed Model on Allocation Formula Base $665 M (Newfoundland $2.35 M) (Yukon $0.208 M) (Remainder 100% MR) [2]	Difference (Proposed Formula VS Current Formula)
	($ millions)	($ millions)	($ millions)
Yukon	0.2	0.2	$0.0
Newfoundland	2.4	2.4	$0.0
Prince Edward Island	7.0	7.1	$0.1
Nova Scotia	6.0	6.1	$0.1
New Brunswick	6.0	6.1	$0.1
Quebec	77.2	73.6	($3.6)
Ontario	140.0	141.9	$1.9
Manitoba	73.8	74.2	$0.4
Saskatchewan	149.7	148.6	($1.1)
Alberta	168.8	170.4	$1.6
British Columbia	33.9	34.6	$0.7
Canada	665.0	665.0	$0.0

Note: Numbers in the parentheses imply reduction in federal funding under the proposed formula compared with the current formula.

[1] Based on 5-year (96-00) rolling averages of farm cash receipts and market receipts shares for non-supply managed commodities.

[2] Based on 5-year (96-00) rolling average of market receipts share (excluding program payments) for non-supply managed commodities.

Table 4.10b: Proposed Federal Funding Model for the $665 million: Allocation Based on 100% Market Receipts (MR) (For the current agreement, additional funding to maintain Manitoba and Saskatchewan at their 98/99 levels is included)

Province	Current Framework Agreement *Base $665 M* (Newfoundland $2.35 M) (Yukon $0.208 M) (Remainder 50:50 FCR/MR) [1] Man/Sask at 98/99 Levels	Proposed Model on Allocation Formula *Base $665 M* (Newfoundland $2.35 M) (Yukon $0.208 M) (Remainder 100% MR) [2]	Difference (Proposed Formula VS Current Formula)
	($ millions)	($ millions)	($ millions)
Yukon	0.2	0.2	$0.0
Newfoundland	2.4	2.4	$0.0
Prince Edward Island	7.0	7.1	$0.1
Nova Scotia	6.0	6.1	$0.1
New Brunswick	6.0	6.1	$0.1
Quebec	77.2	73.6	($3.6)
Ontario	140.0	141.9	$1.9
Manitoba	75.6	74.2	($1.4)
Saskatchewan	195.2	148.6	($46.6)
Alberta	168.8	170.4	$1.6
British Columbia	32.4	34.6	$2.2
Canada	712.3	665.0	($47.3)

Note: Numbers in the parentheses imply reduction in federal funding under the proposed formula compared with the current formula.

1 Allocating $665 M based on 5-year (96-00) rolling averages of farm cash receipts and market receipts shares for non-supply managed commodities and keeping Manitoba and Saskatchewan at 1998/99 level.

2 Based on 5-year (96-00) rolling average of market receipts share (excluding program payments) for non-supply managed commodities.

Table 4.11a: Proposed Federal Funding Model for the $1.1 billion* : Allocation Based on 100% Market Receipts (MR)
(For the current agreement, additional funding to maintain Manitoba and Saskatchewan at their 98/99 levels is excluded)

Province	Current Framework Agreement (Part One) Base $665 M (Newfoundland $2.35 M) (Yukon $0.208 M) (Remainder 50:50 FCR/MR) [1]	Current Framework Agreement Base $435 M (Part Two) Estimate [2]	Estimated Total Under the Current Framework Agreement (Part One+Part Two)	Proposed Model on Allocation Formula Base $1,100 M (Newfoundland $3.35 M) (Yukon $0.208M) (Remainder 100% MR) [3]	Difference (Proposed Formula VS Current Formula)
	($ millions)	($ millions)	($ millions)	($ millions)	($ millions)
Yukon	0.2	0.0	0.2	0.2	$0.0
Newfoundland	2.4	0.1	2.5	3.4	$0.9
Prince Edward Island	7.0	3.5	10.5	11.7	$1.2
Nova Scotia	6.0	3.3	9.3	10.0	$0.7
New Brunswick	5.9	0.7	6.6	10.1	$3.5
Quebec	77.2	92.1	169.3	120.8	($48.5)
Ontario	140.0	67.1	207.1	234.8	$27.7
Manitoba	73.8	63.4	137.2	122.8	($14.4)
Saskatchewan	149.7	120.1	269.8	245.9	($23.9)
Alberta	168.8	76.0	244.8	282.0	$37.2
British Columbia	33.9	8.7	42.6	57.3	$15.3
Canada	665.0	435.0	1,100.0	1,100.0	$(0.0)

Note: Numbers in the parentheses imply reduction in federal funding under the proposed formula compared with the current formula.

* The two-box system would be eliminated and the full federal funding ($1.1 billion, minus $3.35 million for Newfoundland and $0.208 million for Yukon) would be divided between the provinces on the basis of non-supply managed 100% market receipts (excluding program payments).

[1] Based on 5-year (96-00) rolling averages of farm cash receipts and market receipts shares for non-supply managed commodities.

[2] Used an average of the 1998 and 1999 federal AIDA program costs (excluding negative margins) to divide $435 million in federal dollars for disaster programming

[3] Based on 5-year (96-00) rolling average of market receipts share excluding program payments for non-supply managed commodities.

Table 4.11b: Proposed Federal Funding Model* : Allocation Based on 100% Market Receipts (MR)
(For the current agreement, additional funding to maintain Manitoba and Saskatchewan at their 98/99 levels is included)

Province	Current Framework Agreement (Part One) Base $665 M (Newfoundland $2.35 M) (Remainder 50:50 FCR/MR) [1] Man/Sask at 98/99 Levels	Current Framework Agreement Base $435 M (Part Two) Estimate [2]	Estimated Total Under the Current Framework Agreement (Part One+ Part Two)	Proposed Model on Allocation Formula Base $1,100 M (Newfoundland $3.35 M) (Yukon $0.208M) (Remainder 100% MR) [3]	Difference (Proposed Formula VS Current Formula)
	($ millions)	($ millions)	($ millions)	($ millions)	($ millions)
Yukon	0.2	0.0	0.2	0.2	$0.0
Newfoundland	2.4	0.01	2.4	3.4	$1.0
Prince Edward Island	7.0	3.5	10.5	11.7	$1.2
Nova Scotia	6.0	3.3	9.3	10.0	$0.7
New Brunswick	6.0	0.7	6.7	10.1	$3.4
Quebec	77.2	92.1	169.3	121.8	($47.5)
Ontario	140.0	67.1	207.1	234.8	$27.7
Manitoba	75.6	63.4	139.0	122.8	($16.2)
Saskatchewan	195.2	120.2	315.4	245.9	($69.5)
Alberta	168.8	76.0	244.8	282.0	$37.2
British Columbia	33.9	8.7	42.6	57.3	$14.7
Canada	712.3	435.0	1147.3	1,100.0	($47.3)

Note: Numbers in the parentheses imply reduction in federal funding under the proposed formula compared with the current formula.

* The two-box system would be eliminated and the full federal funding ($1.1 billion, minus $3.35 million for Newfoundland and $0.208 million for Yukon) would be divided between the provinces on the basis of non-supply managed 100% market receipts (excluding program payments).

[1] Allocating $665 M based on 5-year (96-00) rolling averages of farm cash receipts and market receipts shares for non-supply managed commodities and keeping Manitoba and Saskatchewan at 1998/99 level.

[2] Used an average of the 1998 and 1999 federal AIDA program costs (excluding negative margins) to divide $435 million in federal dollars for disaster programming.

[3] Based on 5-year (96-00) rolling average of market receipts share excluding program payments for non-supply managed commodities.

Table 4.12a: Annual Spending ($ million) for Safety Net Programs by Province - Fiscal 2001/02:Federal - Provincial Disentanglement [1]

Fiscal 2001/02	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NF	Total
Federal Only Programs:											
NISA - Interest Bonus	1.0	9.4	17.8	6.6	11.8	1.0	0.3	0.4	0.8	0.0	*49.1*
NISA – Basic	7.0	86.1	111.7	48.6	72.4	5.7	2.9	2.6	3.6	0.1	*340.7*
CFIP	14.5	126.7	200.3	105.7	111.8	153.5	1.2	5.5	5.8	0.0	*725.0*
Cash Advances	0.4	4.3	9.1	3.5	1.9	2.4	0.3	0.1	0.3	0.0	*22.3*
Total – National Programs	**22.9**	**226.5**	**338.9**	**164.4**	**197.9**	**162.6**	**4.7**	**8.6**	**10.5**	**0.1**	**1,137.1**
Provincial Programs:											
Crop Insurance [3]	13.9	134.5	185.3	61.1	45.0	36.5	3.3	1.0	1.9	0.2	*482.7*
Whole farm programs	1.2				44.0	4.5		2.6	1.0	0.1	*53.4*
Research and Development	12.8	5.4	0.6	1.0	6.5		0.6	3.4	1.7	3.3	*35.3*
Other Support	6.9	106.5	20.4	1.8	52.9	167.8			3.1	0.0	359.4
Total – Provincial Programs	**34.8**	**246.4**	**206.3**	**63.9**	**148.4**	**208.8**	**3.9**	**7.0**	**7.7**	**3.6**	**930.8**
Total National + Total Provincial	**57.7**	**472.9**	**545.2**	**228.3**	**346.3**	**371.4**	**8.6**	**15.6**	**18.2**	**3.7**	**2,067.9**

[1] Under this approach, there would be no need for an allocation formula. Federal dollars would be spent on the basis of nationally consistent federal-only programs and the provinces would be responsible for any other programs.

[2] Used an average of the 1998 and 1999 AIDA program costs (excluding negative margins) to divide the current $725 million in federal dollars for disaster programming.

[3] Provinces would cover the full cost of crop insurance, including the administrative costs.

Table 4.12b: Proposed Federal Funding Model for the $1.1 billion: Federal-Provincial Disentanglement Approach (For the current agreement, additional funding to maintain Manitoba and Saskatchewan at their 98/99 levels is excluded)

Province	Estimated Total Under the Current Framework Agreement (Part One+ Part Two) [1]	Estimated Annual Spending (Federal - Provincial Disentanglement Approach) [2]	Difference (Proposed Approach VS Current Approach)
	($ millions)	($ millions)	($ millions)
Yukon	0.2	0.0	$0.2
Newfoundland	2.5	0.1	($2.4)
Prince Edward Island	10.5	10.5	$0.0
Nova Scotia	9.3	8.6	($0.7)
New Brunswick	6.6	4.7	($1.9)
Quebec	169.3	162.6	($6.7)
Ontario	207.1	197.9	($9.2)
Manitoba	137.2	164.4	$27.2
Saskatchewan	269.8	338.9	$69.1
Alberta	244.8	226.5	($18.3)
British Columbia	42.6	22.9	($19.7)
Canada	1,100.0	1,137.1	$37.2

Note: Numbers in the parentheses imply reduction in federal funding under the proposed formula compared with the current formula.

[1] See Table 4.11a for detail calculations under this approach.

[2] Under this approach, there would be no need for an allocation formula. Federal dollars would be spent on the basis of nationally consistent federal-only programs and the provinces would be responsible for any other programs (see Table 4.12a for detail calculations).

Table 4.12c: Proposed Federal Funding Model for the $1.1 billion: Federal-Provincial Disentanglement Approach (For the current agreement, additional funding to maintain Manitoba and Saskatchewan at their 98/99 levels is included)

Province	Estimated Total Under the Current Framework Agreement (Part One+ Part Two) [1]	Estimated Annual Spending (Federal - Provincial Disentanglement Approach) [2]	Difference (Proposed Approach VS Current Approach)
	($ millions)	($ millions)	($ millions)
Yukon	0.2	0.0	$0.2
Newfoundland	2.4	0.1	($2.3)
Prince Edward Island	10.5	10.5	$0.0
Nova Scotia	9.3	8.6	($0.7)
New Brunswick	6.7	4.7	($2.0)
Quebec	169.3	162.6	($6.7)
Ontario	207.1	197.9	($9.2)
Manitoba	139.0	164.4	$25.4
Saskatchewan	315.4	338.9	$23.5
Alberta	244.8	226.5	($18.3)
British Columbia	42.6	22.9	($19.7)
Canada	1,147.3	1,137.1	($10.2)

Note: Numbers in the parentheses imply reduction in federal funding under the proposed formula compared with the current formula.

[1] See Table 4.11a for detail calculations under this approach.

[2] Under this approach, there would be no need for an allocation formula. Federal dollars would be spent on the basis of nationally consistent federal-only programs and the provinces would be responsible for any other programs (see Table 4.12a for detail calculations).

CHAPTER 5: POTENTIAL ENVIRONMENTAL IMPACTS OF AGRICULTURAL RISK MANAGEMENT PROGRAMS

5.1 Introduction

Background

The principle of environmental sustainability has guided the design of Canadian agricultural safety nets for more than a decade, since the Farm Income Protection Act (FIPA) has come into effect in 1991. This principle is included in the current Framework Agreements on Agricultural Risk Management. It will continue to guide the design of future agricultural programs to ensure that producers apply environmentally responsible farming practices, as stated in the new Agricultural Policy Framework.

Last June in Whitehorse, ministers agreed in principle on an Agricultural Policy Framework with "*the common goal of securing the long-term prosperity and success of the agriculture and agri-food sector by being the world leader in food safety, innovation and environmentally responsible production.*" This goal is supported by six priorities, one of which is the environmental performance of the sector. This reflects the fact that environment is a critical issue for the future viability of the agricultural sector and for citizens and consumers who are seeking assurances that food is produced in an environmentally responsible way.

Purpose

The purpose of this section is to provide an assessment of the principle of environmental stewardship, as required under the terms of evaluation of the Framework Agreements on Agricultural Risk Management. This will ensure that policy makers have a common understanding of the potentially significant environmental impact of agricultural risk management programs in Canada.

Approach

This document contains two parts. The first part summarizes the theoretical arguments on the potential impact of safety net programs on production. Since environmental impacts are related to production, it is essential to first determine the impact of programs on production.

The second part summarizes the findings of previous environmental analyses conducted for specific safety net programs and identify the potential environmental impact of all agricultural risk management.

5.2 Impact of Programs on Production and on the Environment - Theoretical Arguments

This section describes the potential impact of the agricultural risk management programs on individual producers' behavior and production decisions.

It is generally agreed that it is difficult to design an income support or stabilization program that does not have some effect on the production or structure of the farm, given a program's effect on wealth and farmer's aversion to risk. This indirectly impacts on the environment to the extent that producers change behaviour in response to the program.

Characteristics of Programs that Minimally Distort Production

Rude (2000)[1] presented some rules of thumb that could be used to minimize the chance that individual producers will change their behaviour to take advantage of programs. These are:
- *ex post payments*: the intervention takes place after the individual has made the production decision,, and the payment base for the program is based on a fixed historic criteria such as historic production, therefore producers cannot affect payment size through current behavior;
- *intervention targeted at market failure but not at a particular commodity*: the intervention is not targeted at one specific sector, therefore market considerations should still determine the allocation of resources among sectors;
- *recipient participation*: individuals are partially responsible for financing the program, therefore there is less incentive for them to change their behavior to increase the size of the government payment.

Table 1 presents these considerations through a set of program characteristics and for each program under the Framework Agreement on Agricultural Risk Management.

Decoupled Income Support

Decoupled income support is considered to be production neutral. Since direct payments used for decoupled income support are based on a past, fixed base period, farmers cannot affect payments size through current behaviour, and as a result their current production decisions will only be based on market considerations. This argument, however, does not take into account risk preferences or the fact that producer decisions are based on a greater range of considerations than simply maximizing profits. Any situation in which a direct payment would relax a production constraint could potentially lead to increased production.

With a risk adverse producer the direct payment can produce a wealth effect, analogous to an income effect, which will affect production decisions. A direct payment may reduce the constraints limiting a farmer's production potential and as a consequence lead him/her to increase production. For example, relaxing the debt constraint reduces the interest rate at which the household prefers present to future consumption and the opportunity cost of acquiring capital, which allows more funds to be allocated to future production. The payment which was neutral in the non-debt constrained case leads to increased future production in the debt constrained case.

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[1] Rude, J. (2000) *Green Box Criteria: A Theoretical Assessment*.

Safety-Net Programs

Most income stabilization programs attempt to average the effects of good and bad times by shifting money from periods of relative plenty to periods of relative scarcity. Having the producer respond to average net returns over time may not necessarily include increase production but it may reduce the flexibility necessary to respond to emerging changes in economic conditions. Most safety nets compensate for bad times but do not tax good times; thus they raise average income and induce additional production.

Crop Insurance Program

The economics literature is somewhat ambiguous about the effects of crop insurance on output. Theoretical models of moral hazard in crop insurance support the conclusion that the direction of the moral hazard effect on input use, output, and expected indemnities is ambiguous unless strong assumptions are made about risk preferences and input risk properties. Crop insurance also may encourage producers to move risky marginal land into production and the crop mix may be biased towards production of more risky crops. Empirical evidence of the effect of insurance on input use is mixed. Horowitz and Lichtenberg (1993) and Knight and Coble (1997) concluded that crop insurance increases the use of fertilizer and pesticides. Smith and Goodwin (1996) conclude that fertilizer expenditures will decrease with crop insurance. Price Waterhouse (1994) concludes that Canada cropping decisions are based on a broad number of factors including market conditions and other programs which overwhelm the effects of crop insurance.[2]

5.3 Environmental Analyses of Specific Agricultural Risk Management Programs

Summary of Findings

This section presents a summary of the findings about the potential environmental impact of three major agricultural risk management programs: Crop Insurance, Net Income Stabilization Account, Canadian Farm Income Program. It also concludes on the production and environmental impact of agricultural risk management programs.

Linking Production Changes to Potential Risk to the Environment

Changes in producers' behavior or production decisions include the allocation of land between crops, the use of land for livestock and other potential uses, the selection of crops and related production practices such as nutrient applications and pest management. In turn, these production decisions could impact upon the environment, especially in regards to soil erosion, water quality and wildlife habitat. The question then is to assess the relative importance of these effects.

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[2]Rude, J. (2000) *Green Box Criteria: A Theoretical Assessment*, p. 14.

Environmental Analyses of Crop Insurance

Two environmental assessments of the Crop Insurance (CI) program have been conducted since the implementation of FIPA: one in 1994 by Price Waterhouse[3] and one in 1998 by Agriculture and Agri-Food Canada (AAFC)[4].

Price Waterhouse concluded that "no significant environmental impacts (...) could be attributed specifically to crop insurance" but "there were some indications that there was no clear disincentive to undertake potentially harmful practices" and "there were also a number of potential problem areas identified in specific regions and crops.[5]"

AAFC's report summarized the environmental impact of crop insurance in the following terms: "the overall impact of CI on resource utilization and the environment is small. At a regional level, the environmental impact of CI is ambiguous, at least in terms of soil erosion. In some instances the producer response to CI can reduce erosion rates, especially where it encourages less use of summerfallow, but in other regions and situations it can encourage a shift of marginal land from forage production into more erosive grain and oilseed production. (...) The CI program may have small effects on the risk of environmental degradation of a few key resources in the Prairie provinces and Ontario. It has no significant effects in British Columbia, Quebec or the Atlantic provinces. All of the possible increases in risks to natural resources due to CI are very small in the context of the total area at risk due to agricultural activities."[6]

AAFC's report concluded overall that "Crop Insurance would not appear to have any significant environmental implications which would warrant making modifications to the program"[7].

5.4 Environmental Analyses the Net Income Stabilization Account (NISA)
NISA Environment Assessment (1993)

The conclusion of the 1993 Environmental Assessment of NISA was that the overall impact of NISA on cropping and land use diversity was a negative, negligible, short-term impact. Essentially, it can be argued that market influences likely have a greater influence on crop selection and land use activities than an existing program such as NISA. The impact is considered short-term since markets are constantly changing, thus impacting cropping diversity.

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[3]Price Waterhouse (1994). *Synthesis and Recommendations: Environmental Assessment of Crop Insurance*. Final Report for Agriculture Canada. Ottawa.

[4]Agriculture and Agri-Food Canada (1998). *The Federal-Provincial Crop Insurance Program. An Integrated Environmental-Economic Assessment*. Ottawa.

[5]Price Waterhouse (1994). Idem, p.E-4.

[6]Agriculture and Agri-Food Canada (1998). *The Federal-Provincial Crop Insurance Program. An Integrated Environmental-Economic Assessment*. Ottawa., p. 79.

[7]Agriculture and Agri-Food Canada (1998). Idem, p. iii.

Analysis using the Portfolio Theory

The portfolio theory[8] was used to evaluate the impact of NISA since the decisions made by producers regarding where to invest their funds will impact the agricultural sector. Producers can invest in agricultural factors of production, NISA or another investment vehicle. Producers choose to invest in the mix that maximizes high returns and low risk.

The paper concluded that NISA has an indeterminate effect on production. On one hand, it reduces agricultural investment by subsidizing the movement of capital out of agricultural production and other investment vehicles and into NISA accounts. Therefore, as capital moves out of production, it is expected that a reduction in crop production and livestock production would occur. On the other hand, NISA increases net returns to agricultural activity in the long-term, providing an incentive to production. It also reduces the risk of severe farm income downturns, which may encourage longer-term agricultural investments. Since the effects work in opposite directions, NISA likely has little overall effect on production levels and hence on environmental degradation.

Other Analyses of Programs' Impact

Repeated analyses of NISA have found that it has virtually no influence on production decisions, particularly when compared to programs in other countries. Rude[9] found that the production effects of NISA could be either positive or negative, and in any case are minimal.

Martini[10] found that "the NISA program has a fairly uniform impact across commodities. This is to be expected in light of the non-commodity-specific nature of the program. NISA's impact on output is mild, with an at-most 1% increase in production due to its presence". This compared to increases of 5% to 50% due to US and EU programs.

Burfisher et al.[11] found the output effect of reduced risk in Canada due to NISA to be 2.3% compared to 7.4% for the US and 6.8% for Mexico. They also found the "effects of increased payments on corn and feedgrains in Canada [to be] close to zero."

Preliminary Environmental Analysis of the Canadian Farm Income Program (CFIP)

Intuitively, it could be argued that CFIP provides income stability and as a result may influence production decisions in the short-run. However, considering the design and complexity of the program, and its duration, it is unlikely that CFIP will encourage production beyond its current level. On the other hand, CFIP benefits may keep low-profit farms in business longer than without the program. If these low-profit farms are more likely to have farming practices that

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[8]Agriculture and Agri-Food Canada (1997), *Use of Portfolio Theory to Evaluate the Impact of NISA*, draft discussion paper.

[9]Rude, J. *An Examination of Nearly Green Programs: Case Study for Canada*. American Journal of Agricultural Economics, August 2000.

[10]Martini, R. *An Application of the Policy Evaluation Matrix (PEM) Model to Alternative Agricultural Program Scenarios in Canada*, AAFC internal draft report.

[11]Burfisher et al. *North American Farm Programs and the WTO*. American Journal of Agricultural Economics, August 2000.

could be environmentally unsustainable, CFIP may be inadvertently supporting such practices.

CFIP is only one of many factors that affect producers' decisions regarding resource utilization. The program is probably of minor importance compared to other factors such as market prices, technological change, structural changes, long-term government safety net programs, trade policy and tax policy.

Potential Environmental Impact of Agricultural Risk Management Programs

Previous environmental analyses demonstrated that individual agricultural risk management programs have minimal impact on the environment, considering that producers' decisions are overwhelmed by other factors.

Nevertheless, agricultural risk management programs which provide support in relation to specific commodity, and not a whole-farm support, such as Crop Insurance and some provincial support programs, are more likely to influence producers decisions. This, in turn, may impact on the environment, especially in more ecologically sensitive areas. However, the potentially negative effect of these programs on the environment would be somewhat constrained by provincial environmental legislation, municipal by-laws, and by local resident's attitude towards agricultural activities.

A summary of the potential environmental effects of Agricultural Risk Management Programs is presented in Table 2.

2001 Report of the Commissioner of the Environment and Sustainable Development

In a recent report on the Great Lakes and St. Lawrence River Basin, the Commissioner of the Environment and Sustainable Development (CESD) pointed out that "Federal and provincial governments now direct most of their financial support for farmers not at specific crops but at the farmer's net income. Such programs are intended to avoid distorting trade and production decisions. The support also provides no direct incentive to grow one type of crop over another - so it would not promote the growing of crops that have severe environmental impacts. There may be indirect effects, however. For example, by reducing the risk of financial losses, income support programs encouraged Ontario farmers to keep their fields in corn. This increased the risk of groundwater contamination by nitrogen." She also indicated that "[a] study of Ontario farm support policies found that income stabilization encourages more intensive production, the growing of crops on marginal land, and increased use of pesticides, fuel, and fertilizer."[12]

Although the study focuses on the Great Lakes and St. Lawrence Basin, the argument that income support encourages more intensive production could be made for other regions as well. Changes in agricultural output and intensity depends on input use, such as fertilizers and pesticides, on technology, and on use of primary factors such as land, labour and capital. It could be argued that these factors may be more influenced by market and trade conditions than by domestic support programs.

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[12]2001 Report of the Commissioner of the Environment and Sustainable Development. Chapter 1—A Legacy Worth Protecting: Charting a Sustainable Course in the Great Lakes and St. Lawrence River Basin. Section 4 - Agriculture, October 2001, p. 165.

Considerations regarding Capitalization into Land Value

Government support programs may be (rather than are largely capitalized) into land values depending on their design. Thus, by keeping land values higher than the market would dictate might lead to an increase use of substitutes for land, including farm chemicals such as fertilizers and pesticides. Should this be the case, support programs may inadvertently raise the risk of nutrient contamination of water in specific areas.

Farm Structure Considerations

The relationship between changes in farm size and structure and the environment is weak. "There is considerable disagreement as to whether one particular set of farm structures, in terms of the mix of farms of different size and type, is any more beneficial to the environment than any other set. Some consider that small family farms and part-time farmers are inherently more concerned than larger farm businesses with conserving and enhancing environmental quality. Others maintain that there is no logical reason or empirical evidence that small farms are any better placed to deliver environmental benefits than any other size of farm[13]."

Conclusion

Overall, although agricultural risk management programs are designed to be production neutral, they may influence producers' decisions. Whole-farm programs, however, have minimal impact on production, and hence on the environment. A whole-farm program such as NISA is considered less distorting because it provides ex-post payout, its benefits are capped, and it requires producers contributions.

Programs which provide support at the commodity level, although they may cover a certain range of commodities, are more at risk of distorting production. Environmental analyses of the crop insurance program have, however, demonstrated that the effects of the program on the environment are overall minimal, except in some limited ecologically sensitive areas. Producers' decisions are overwhelmed by factors such as price and market conditions, technological change, and structural changes

[13]OECD, *Agricultural Policy Reform: New Approaches. The Role of Direct Payments.*

Table 5.1 - Program Characteristics[1] Which May Influence Individual Producers' Behavior

	Commodity Specific	Recipients Contribute	Ability to Foresee Payments / Benefits	Payment Criteria Fixed	Off-Setting Effects	Wealth Effects	May Relax Debt Constraints
	Program available for one specific commodity or for a narrow range of commodities	Individual producer contribute to the funding of the program	Producer is able to anticipate payment or probability of payment and adjust/choose production consequently	No possibility for producer to affect the size of payout	Program have opposite, off-setting effects on producers' decisions	Program increase wealth or income of recipient	Program benefit increase borrowing capacity to invest in productive assets
Crop Insurance	Wide range of crops covered	Yes	No Some producers may have higher probability of losses than other	No	No	Yes	Yes
NISA basic, top-ups	Whole-farm Generally available to non supply-managed commodities (except for mixed farms)	Yes	No, trigger provides ex post payout	Limited possibility to affect government contribution and interest bonus	Yes	Yes	Yes, if withdrawals used to stabilize or enhance income. Not of much assistance in reducing debt constraints if used as a retirement's saving instrument

[1]Based on work by J. Rude (*An Examination of Nearly Green Programs: Case Studies for Canada, the United States and the European Union*); adapted by L. Bourque to include all Agricultural Risk Management Programs

	Commodity Specific	Recipients Contribute	Ability to Foresee Payments / Benefits	Payment Criteria Fixed	Off-Setting Effects	Wealth Effects	May Relax Debt Constraints
NISA - SDRM (Ont)	Whole-Farm Available for a narrow range of commodities	Yes	No, trigger provides ex post payout	Limited possibility to affect government contribution and interest bonus	Yes	Yes	Yes, if withdrawals used to stabilize or enhance income If used as a retirement's saving fund, not of much assistance in reducing debt constraints
Canadian Farm Income Program, incl. provincial coverage of negative margin	Whole-farm All commodities	No	No, trigger provides ex post payout Producers expressed concerns over unpredictability of payment	No possibility for producer to affect the size of payout	No	Yes	Yes
Companion - Market Revenue Insurance (Ont)	Targeted to grains and oilseeds	Only if producer receives a payout, then premium is deducted	Yes, at some extent (guaranteed price is foreseeable by commodity)	Possibility for producer to affect government payout	No	Yes	Yes

	Commodity Specific	Recipients Contribute	Ability to Foresee Payments / Benefits	Payment Criteria Fixed	Off-Setting Effects	Wealth Effects	May Relax Debt Constraints
Companion - PEI Potato Programs (Potato Disposal, Seed Potato Incentive, Seed Potato Virus Reduction, Elite Seed Potato)	Specific to potato production (seed, table)	No participation in Seed Potato Crop Insurance Program	No for Disposal Program: ex-post payout Yes for Seed Potato programs	Possibility for producers to affect the size of payout on Seed Potato programs, but not on the Disposal Program	No	Yes	Yes
Companion - ASRA Contribution (Qué)	Wide range of commodities: crop and livestock (except supply-managed commodities)	Yes	Yes	Possibility for producer to affect the size of payout	No	Yes	Yes
Advance Payments Program	Range of commodities, mostly field crops	No.	Yes	$50,000 limit on interest-free loan and $250,000 guaranteed advance: not a strong incentive to change production decisions	No	Yes on the interest- free portion Other potential (marginal) wealth effects: - if lower interest rate on guaranteed advances - if succeed to market production on better terms	Yes, if it provides incremental credit No, if it displaces private credit (may reduce capacity to borrow for non-guaranteed loans)

	Commodity Specific	Recipients Contribute	Ability to Foresee Payments / Benefits	Payment Criteria Fixed	Off-Setting Effects	Wealth Effects	May Relax Debt Constraints
Spring Credit Advance Program	Range of commodities, crops covered under the Crop Insurance program	No, but producers must participate in Crop Insurance	Yes	$50,000 limit on interest-free loan and $250,000 guaranteed loan: not a strong incentive to change production decisions For producers in financial difficulty, there may be an incentive to plant more acreage	No	Yes (interest free portion)	Yes, if it provides incremental credit No, if it displaces private credit (may reduce capacity to borrow for non-guaranteed loans)
Companion: Industry Development Fund, Research and Development Program	Wide range of projects across all agri-food sectors No direct support to individual farmers.	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Table 5.2 - Potential Environmental Impact of Agricultural Risk Management Programs

	Potential Impact of Program on Behavior of Individual Producers	Potential Environmental Effect	Risk of Potential Environmental Effect
Crop Insurance	May increase production of insured crops May encourage production of riskier, higher value crops May encourage some marginal shifts from less intensive use such as hay production to grain and oilseed Insurance of new crops may encourage diversification May encourage the testing or adoption of new practices such as good farming practices Unseeded acreage benefits: may reduce input use (fuel, etc.) *Note:* Two-tier Crop Insurance and SDRM expected to have less impact than regular Crop Insurance since they provide weaker signals to producers in terms of risk reduction, land use and cropping decisions	May bring environmentally sensitive or marginal land into production, resulting in some habitat losses. But individual based coverage limits the incentive of production on marginal lands Riskier crops may require more fertilizers and pesticides, thus may increase the risk of water degradation	Minimal impact at the aggregate level. However, in some sensitive areas (especially in the Prairies and Ontario), the impact could be more significant
NISA (incl. top-ups, mixed farms, SDRM)	May remove investment in agriculture to put them into savings; on the other side, may also encourage farmers to invest in agriculture and thus increase production Overall, no strong incentive on production decisions	Difficult to attribute specific effects on the environment in relation with the program	Insignificant risks or benefits compared to market conditions, input use, technology, environmental provincial legislations, other direct support programs, etc.

	Potential Impact of Program on Behavior of Individual Producers	Potential Environmental Effect	Risk of Potential Environmental Effect
CFIP (incl. negative margin coverage)	No real incentive on production, especially if program is short-term May maintain in production financially vulnerable farmers	Difficult to attribute specific effects on the environment in relation with the program May contribute to some negative impact if financially vulnerable producers are more at risk of adopting environmentally unsustainable farming practices	Insignificant risks or benefits compared to market conditions, input use, technology, environmental provincial legislations, other direct support programs, etc.
Companion - Market Revenue Insurance	May encourage production of grains and oilseeds, covered under the program May encourage use of marginal land	May bring environmentally sensitive or marginal land into production, resulting in some habitat losses Riskier crops may require more fertilizers and pesticides, thus may increase the risk of water degradation May contribute to risks of soil erosion or soil compaction May also facilitate the adoption of environmentally sound practices by reducing risks associated with returns	Risks are similar or likely higher than for Crop Insurance.
Companion - PEI Potato Programs	May increase the production of seed potato May encourage to follow seed production protocol (Seed Potato Virus Reduction Program)	May contribute to risks of water contamination by fertilizers and pesticides May also contribute to limit some diseases in seed potato fields, which in turn may require less pesticides	Somewhat marginal risks or benefits compared to market conditions, input use, technology, environmental provincial legislations, etc.

	Potential Impact of Program on Behavior of Individual Producers	Potential Environmental Effect	Risk of Potential Environmental Effect
Companion - ASRA Contribution	May affect production decisions by reducing the risk of producing commodities covered by ASRA May increase the production of commodities covered by ASRA May encourage farms to become larger, thus contribute to higher livestock concentration	May contribute to risks of water contamination by manure, fertilizers and pesticides May contribute to risks of soil erosion, soil compaction May also facilitate the adoption of environmentally sound practices by reducing risks associated with returns	Somewhat marginal risks or benefits compared to market conditions, input use, technology, environmental provincial legislations, etc. However, the risks may be higher in some ecologically- sensitive areas
Advance Payments Program	No strong incentive on production decisions Potential impact on land allocation and crop selection	May contribute marginally to contamination of water by nutrients and pesticides residues depending on: - selection of crops and related chemical inputs requirements; - how chemicals are used (which is not an effect of the program)	Insignificant risks or benefits compared to market conditions, input use, technology, environmental provincial legislations, other direct support programs, etc.
Spring Credit Advance Program	No strong incentive on production decisions, although the program may encourage financially vulnerable farmers to plant more acreage than without the program; thus may maintain in production some crop land Potential impact on land allocation, crop selection and tillage practices, nutrient and pest management	May contribute marginally to contamination of water by nutrients and pesticides residues depending on: - selection of crops and related chemical inputs requirements; - how chemicals are used (which is not an effect of the program)	Insignificant risks or benefits compared to market conditions, input use, technology, environmental provincial legislations, other direct support programs, etc.

	Potential Impact of Program on Behavior of Individual Producers	Potential Environmental Effect	Risk of Potential Environmental Effect
Companion Programs: Industry Development Fund or Research and Development	R&D Companion programs do not provide direct support to producers, and as such have virtually no impact on individual producers' decisions. These programs may, however, encourage farm diversification into new products, adoption of new technology, adoption of good farming practices.	Potentially some positive environmental benefits, on a limited scale, as a result of better knowledge and greater awareness of good farming practices.	Overall, insignificant risks or benefits compared to market conditions, input use, technology, environmental provincial legislations, direct support programs, etc.

CHAPTER 6: SUMMARY AND CONCLUSIONS

In Whitehorse, Ministers agreed on a new vision for agriculture policy, which builds on the foundation of safety nets programming. This approach encompasses changing demands in food safety and the environment, aims to better address opportunities in science and to provide skills and options through renewal.

This assessment has focused on three key dimensions of safety net programs, and the economic context in which these programs function. Firstly, the impact of world market conditions on producers' incomes, and the role that programs (domestic and foreign) have played. Secondly, the responsiveness of our programs, as a suite, to producers needs under differing income circumstances, and that of similar farms facing similar circumstances. Thirdly, issues relating to safety net funding are identified and discussed.

Long-term competitive pressures have driven commodity prices downward. However, the price decline, which has been observed since 1995 has been the result of demand and supply conditions as well as significant international subsidies. Contributing to this is the production growth of low cost – low subsidy competition for some commodities.

Further, subsidies tend to translate into higher costs for producers. This relates not only to the value of assets, such as land, but to the prices paid for other inputs as well. In the case of the United States, their approach to farm income support has also limited diversification by masking the signals which world markets have been sending. This has resulted in the situation where Canadian farmers receive a significantly larger percentage of their incomes from markets than do their American counterparts.

The current suite of safety net programs have exhibited some success at stabilizing farm incomes, but demands for ad hoc payments have continued. These demands raise questions about the effectiveness of existing programs. Specific concerns are related to the linkages among programs, which in some cases are not only confusing, but also arbitrary in relation to the objective of the program and the linkage itself. As well, when considered together, overall objectives of safety net programs as perceived by governments and farmers are not clear.

Further, the existing safety net programs were designed independently of one and another. Not only has this led to some degree of overlap and duplication; but, has also has left some gaps in risk coverage. There is concern that programs do not adequately cover periods of sustained low income and the impact of international subsidies.

In short, in order to resolve issues relating to incentives and to reduce both the overlap and duplication of payments as well as the gaps in coverage, it is necessary to consider options to improve the performance of safety net programming.

It is clear that provinces and producers alike have concerns about how safety net funding is allocated among provinces. Safety net funding varies across provinces and commodities. There remain many issues relating to funding allocation and cost sharing. There is a view that current cost sharing places a burden on provinces with large agriculture sectors relative to population. This report has attempted to document a number of the disparate views that are held; and, to identify a number of possible alternatives to the current arrangement without prejudice as to the appropriateness of the current arrangement.

A1. An Evaluation of the Market Revenue Insurance (MRI) Program in Ontario

1.1 Purpose of the Program

This Ontario based companion program (originated from the Gross Revenue Insurance Program under the Farm Income Protection Act), provides revenue protection to grain and oilseed producers from dramatic price declines.

1.2 Program Design and Description

For the 2000 crop year the MRI support price for each eligible crop is 85% of the 15-year indexed average Ontario price. MRI payments are made when the average annual Ontario price for the current crop year is less than the support price. The payment per unit is the difference between the support price and the average annual price multiplied by the guaranteed production level. Guaranteed production under MRI is 85% of the producer's average farm yield. No MRI premiums are required. Producers receive two-thirds of the payment, with the other one-third deducted in lieu of premiums.

Producers who grow grain and oilseed crops in Ontario are eligible to participate in the program. Commodities covered under this program for the 2000 crop year are Winter Wheat, Red Spring Wheat, Spring Grain, Soybeans, Canola, Sun Flowers, Corn, Seed Corn, Popping Corn, White Beans, Colored Beans, Faba Beans, Field Peas, Flax and Triticale.

1.3 Evaluation of Program against Guiding Principles of the Framework Agreement

Program Principles	Program Assessment
Production and Market Neutrality – Programs should not influence farmers' production and marketing decisions and should not distort regional comparative advantage.	*MRI does not cover all agricultural production (covers only grain and oilseed crops), therefore, the MRI program may increase production of grain over other crops.*
Trade Neutrality – Programs should minimize countervail risk.	*MRI is a direct price support program. This could be a concern, but there has not been pressure from the U.S. industry to impose countervailing duties against Ontario grain and oilseed crops. However, in long run this program may create trade risks.*
Environmental Sustainability – Program should not be adverse to environmental stewardship.	*The impact that the MRI program will have on the environment is related to the impact it may have on production. This program could distort production decisions (may encourage grain production over other crops). As a result, producers may bring marginal land into production, but it is likely that few acres would be affected.*

Adaptation and Adjustment – Programs should not be adverse to market-oriented adjustments.	*This program does not interfere with any market-oriented risk management program, but it could slow adjustment out of the grain and oilseed sector.*
Minimal Overlap and Duplication – Programs should not duplicate purpose and payments.	*MRI program is linked to the Ontario Farm Income Disaster Program (OFIDP). Any payment under MRI is deducted from the OFIDP. Therefore, the program does not create duplication in terms program payments.*
Minimal Moral Hazard – Programs should minimize moral hazard.	*The problem of moral hazard arises if farm households are able to take actions (not observed by government) that affect expected loss and increase the likelihood of payments/indemnities.* *MRI offers direct price protection to grain and oilseed producers from dramatic price declines. There may be incentive for farmers to change their management practices and production decisions for covered crops in order to receive program benefits.*
Funding Principles	
Non-Distorting Distribution of Government Funds – Allocation of funding should not be distorting to regional/commodity comparative advantage.	*MRI is currently available only to Ontario grain and oilseed producers, although Quebec producers benefit from ASRA and grain and oilseed producers in other provinces have benefited from ad hoc support (e.g. Alberta acreage payments).*
Cost-Sharing – Producers and both orders of government should share program costs, including premiums, deficits and administration.	*MRI is a cost share initiative of the federal and provincial government. No premium payments are required from producers in MRI program. Producers receive two-thirds of the payment, with other one-third deducted in lieu of premiums. Administrative costs are shared equally by both levels of government.*
Capping – There shall be limits on the level of assistance provided to individual producers.	*There is no payment cap under MRI.*
Equity – The financial resources of the Government of Canada should be allocated to provide, over time, the same level of protection for farmers in similar circumstances.	*This program provides equitable treatment to Ontario grain and oilseed producers as Quebec producers benefit from ASRA and grain and oilseed producers in other provinces benefit from ad hoc assistance time to time.*

1.4 Overall Importance of the Program to Producers

- The MRI program reduces farm income/revenue swings for grain and oilseed producers in Ontario.

- Majority of producers are satisfied with this program. The MRI has the potential to be an effective tool to manage income/revenue risks and help producers through low-income periods.

1.5 Concerns Raised about the Program by Producers

- Support level is not high enough and should be increased to be comparable to the support level that grain and oilseed producers in Quebec and the U.S. enjoy.

- Producers want to move to cost of production based support as opposed to index moving average price.

A2. An Evaluation of the Self-Directed Risk Management (SDRM) Program in Ontario

2.1 Purpose of the Program

There are a significant number of horticultural crops in which crop insurance plans are not available or not effective. The SDRM program in Ontario is an alternative to Crop Insurance for all edible horticulture crops except nuts, mushrooms, and major processing vegetables.

2.2 Program Design and Description

The SDRM program is an Ontario-specific "companion program". The SDRM program was originally a three-year pilot project for the 1996, 1997 and 1998 tax years. This pilot was extended for the 1999 taxation year. Beginning with the 2000 taxation year, the program will operate as a permanent alternative to the Crop Insurance program for Ontario horticulture producers at a 2%-2%-4% (fed-prov-producer) contribution rate. The program operates as a top-up to the Net Income Stabilization Account (NISA) program.

SDRM enables producers to make additional deposits to their NISA accounts of up to 4% of ENS. The federal and provincial governments match this contribution. Currently, the annual ENS limit is $250,000 for a participant and the individual lifetime account balance limit is $375,000. Account configurations and triggering mechanisms are same as NISA.

All edible horticulture crops are covered except nuts, mushrooms, and most processing vegetables under the jurisdiction of the Ontario Vegetable Growers' Marketing Board. Currently, there are 135 horticulture commodities are eligible for SDRM participation. Plan to move to stand-alone program to be delivered by the province starting with the 2002 crop year.

2.3 Evaluation of Program against Guiding Principles of the Framework Agreement

Program Principles	Program Assessment
Production and Market Neutrality – Programs should not influence farmers' production and marketing decisions and should not distort regional comparative advantage.	*SDRM does not cover all agricultural production; it is an alternative to crop insurance for all edible horticulture crops. This program creates a level playing field with those that benefit from crop insurance. It is unlikely to expect that SDRM will have a significant impact of producers' production or marketing decisions.*
Trade Neutrality – Programs should minimize countervail risk.	*The SDRM program is not a direct price support to farmers; therefore, it creates no trade risks.*

Environmental Sustainability – Program should not be adverse to environmental stewardship.	*The impact that the SDRM program will have on the environment is related to the impact it may have on production. However, the SDRM program does not have an impact on a farmer's incentive to increase the production of edible horticultural crops. Thus the impact on the environment is negligible or no impact at all.*
Adaptation and Adjustment – Programs should not be adverse to market-oriented adjustments.	*This program does not interfere with normal market-oriented adjustments.*
Minimal Overlap and Duplication – Programs should not duplicate purpose and payments.	*SDRM is an alternative to crop insurance. To be eligible for SDRM, the producers cannot have enrolled in crop insurance for that crop in that same year. Therefore, the program does not create duplication in terms of its purpose and payments.*
Minimal Moral Hazard – Programs should minimize moral hazard.	*Under SDRM, the rate of contribution is fixed. There is little incentive for farmers to change their management practices and production decisions in order to receive program benefits.* *With limits on deposits and the fact that the balance on account is owned by the producers, the incentive to practice moral hazard is minimal.*
Funding Principles	
Non-Distorting Distribution of Government Funds – Allocation of funding should not be distorting to regional/commodity comparative advantage.	*SDRM is an alternative to crop insurance for all edible horticulture crops where crop insurance plans are ineffective or participation is low. In the absence of SDRM, then crops without crop insurance are at a disadvantage.*
Cost-Sharing – Producers and both orders of government should share program costs, including premiums, deficits and administration.	*SDRM is a cost share initiative of the federal and provincial governments (50/50 on contribution) and government pays 100% of administration cost.*
Capping – There shall be limits on the level of assistance provided to individual producers.	*The SDRM program helps eligible participants to manage income disasters. As with NISA, capping account balances ensures that large account balances are not accumulated.*

Equity – The financial resources of the Government of Canada should be allocated to provide, over time, the same level of protection for farmers in similar circumstances.	*SDRM provides equitable treatment for producers that do not have a crop insurance program.*

2.4 Overall Importance of the Program to Producers

- The current crop insurance system has a number of drawbacks for horticulture producers due to the inability to obtain efficient administrative information. This results in insufficient coverage levels, and/or premium levels that are not appropriately set. SDRM solves this problem by providing a comparative level of support o help producers deal with the production risks they face.

- Reasons to participate in SDRM (Participants response, Survey conducted by OF&VGA):

  crop insurance premiums were too high for the specific commodity

  production risk was too low to require crop insurance

  more appropriate given their management strategies

  crop insurance coverage and/or premium levels were not appropriate due to a lack of adequate information

- Currently there are 135 edible horticulture commodities in Ontario eligible for SDRM participation. Of the **135** commodities eligible for SDRM participation, only **27 (about 20%)** of these commodities have crop insurance available to them. Therefore, in the absence of SDRM, **109** commodities would not have specific coverage available to them.

- This program improves income stability/reduces requests for ad hoc assistance for edible horticulture producers due to crop losses.

- As a risk management tool, the SDRM is becoming popular in Ontario among edible horticulture producers. In the 1996 stabilization year (the first year of the pilot), 1,153 producers participated in SDRM. In the 1999 stabilization year, 1,732 producers participated in SDRM. This is an increase of more than 50% in participation from the 1996 to 1999 stabilization year. SDRM is effective for edible horticulture crops where crop insurance plans are not available.

2.5 Concerns Raised about the Program by Producers

- Contribution rate is not high enough and should be increased to be comparable to the support provided by Crop Insurance.
- $250,000 annual contribution limit and overall fund cap within NISA are felt to be too low for horticulture production and separate SDRM accounts are needed (SDRM Fund 1 and SDRM Fund 2).
- Producers want a stand-alone program, not just another top-up to NISA.

A3. *An Evaluation of the NISA Enhancement (Top-Up)* Programs in Ontario

3.1 Purpose of the Program

The purpose was to allow participating producers to make additional NISA contributions that would build up account balances, and greatly increasing the effectiveness of the program over time.

3.2 Program Design and Description

In accordance with the Canada-Ontario Framework Agreement on Agricultural Risk Management and the base NISA program, Ontario offers two main NISA enhancement programs. One is called the General Top-Up (for all non-supply managed eligible commodities) and the other is called the Edible Horticulture Top-Up (for most edible horticultural crops). The federal and provincial governments provide an additional 1% (0.5% each) in matching contributions for all eligible NISA commodities under the General Top-Up. The federal and provincial governments also provide an additional 2% (1.0% each) in matching contributions for edible horticultural crops under the Edible Horticulture Top-Up. These enhancements were introduced to the base program in the 1994 tax year based on considerable model farm analysis by OMAFRA and the federal government which demonstrated how higher contribution rates increase program effectiveness. NISA contribution rates for base NISA and enhancement programs from both levels of government and producers are presented in Table 1.

Table 1: NISA Contribution Rates in Ontario

	Contribution Rates (% of ENS)		
Components	Federal	Provincial	Producers
Base NISA	2.0	1.0	3.0
General Top-Up	0.5	0.5	1.0
Total – All Producers	**2.5**	**1.5**	**4.0**
Edible Horticulture Top-Up	1.0	1.0	2.0
Total – Edible Horticulture Producers	**3.5**	**2.5**	**6.0**

3.3 Evaluation of Program against Guiding Principles of the Framework Agreement

Program Principles	Program Assessment
Production and Market Neutrality – Programs should not influence farmers' production and marketing decisions and should not distort regional comparative advantage.	*The General Top-Up does not influence a farmer's decision to provide any commodity eligible under the program since the contribution rate is the same for most commodities. The additional contribution for edible horticulture partially off-sets the signal to produce more grains and oilseeds as a result of the Market Revenue Insurance program.*
Trade Neutrality – Programs should minimize countervail risk.	*NISA has been classified as an amber, non-product specific support. The NISA General Top-Up may not have any impact towards increasing production since the contribution*

	rate under this Top-Up is very small and this Top-Up is not product specific (whole farm and generally available). Therefore, this Top-Up may be classified as amber like as NISA. On the other hand, the Edible Horticulture Top-Up is product specific (available for edible horticultural crops). As with the General Top-Up, this Top-Up also may not have any impacts on production since the contribution rate is not that high. The U.S. Department of Commerce did not find the NISA program (including Top-Ups) countervailable in the hog and cattle cases.
Environmental Sustainability – Program should not be adverse to environmental stewardship.	*The impact that the base NISA and NISA Top-Up will have on the environment is related to the impact they have on production. However, the NISA Top-Ups does not have any significant impact on a farmer's incentive to increase production. Thus, the impact on the environment is negligible or no impact at all.*
Adaptation and Adjustment – Programs should not be adverse to market-oriented adjustments.	*These Top-Ups do not interfere with normal market adjustments.*
Minimal Overlap and Duplication – Programs should not duplicate purpose and payments.	*The Edible Horticulture NISA Top-Up was started in Ontario because grain and oilseed producers were getting benefit from the Market Revenue Insurance Program (MRI). Hence, this Top-Up helps to offset the distorting impact of MRI. Therefore, the program does not create duplication in terms of its purpose and payments.*
Minimal Moral Hazard – Programs should minimize moral hazard.	*Under NISA/NISA Enhancement, since government matching contributions are contingent on farmers' qualifying net sales and the rate of contribution is fixed, there is little incentive for farmers to change their management practices and production decisions in order to receive program benefits. However, as producers reach the overall fund balance caps, there may be more potential for moral hazard behavior through triggering withdrawals in order to capture additional government deposits.*

Funding Principles	
Non-Distorting Distribution of Government Funds – Allocation of funding should not be distorting to regional/commodity comparative advantage.	*Currently several provinces have NISA enhancement programs in place. In Ontario, the Edible Horticulture Top-Up is only in place as long as grain and oilseed producers benefit from the MRI Program. As a result, the Edible Horticulture Top-Up helps to offset the impact that MRI has to encourage grain and oilseed production.*
Cost-Sharing – Producers and both orders of government should share program costs, including premiums, deficits and administration.	*The NISA Top-Ups are a cost share initiatives of the federal and provincial governments (50/50 on contribution) and require very low administrative costs to operate.*
Capping – There shall be limits on the level of assistance provided to individual producers.	*NISA enhancements within NISA program have similar ENS and fund balance cap. By limiting ENS, base NISA and Top-Ups ensure that government funds are targeted to vulnerable producers rather than very larger farmers. Therefore, these companion programs are targeted and capped.*
Equity – The financial resources of the Government of Canada should be allocated to provide, over time, the same level of protection for farmers in similar circumstances.	*The federal government participates to varying degrees in the programs in several provinces and program costs are equally cost-shared by the both levels of government. In Ontario, the General Top-Up is in place to allow all participating producers to make additional NISA contributions and the Edible Horticulture Top-Up is in place to counter act the grain and oilseed producers that obtain benefit from the MRI program.*

3.4 Overall Importance of the Program to Producers

- The NISA enhancement programs allow participating producers to make additional NISA contributions that would build up account balances, greatly increasing the effectiveness of the program over time.
- The NISA enhancement programs have been very effective in generating additional contributions through increased participation in the NISA program.
- These enhancement programs have a negligible impact on production or marketing decisions; have no detrimental impact on the environment; require very small administrative costs to operate; create little or no trade risks; improve income stability; carry very limited risk of moral hazard; and are targeted and capped.

3.5 Concerns Raised about the Program by Producers

- Contribution rates are not high enough to provide adequate support in case of a dramatic decline in farm income. Producers also raise concern for annual ENS cap ($250,000 cap is too low).

A4. Agriculture Income Disaster Assistance / Canadian Farm Income Program

4.1 Purpose of the Program

The Agriculture Income Disaster Assistance (AIDA) program and the Canadian Farm Income Program (CFIP) were designed to provide support to help producers experiencing severe declines in farming income stabilize their income level in combination with other safety net programs.

4.2 Program Description

The Agriculture Income Disaster Assistance program is the predecessor to the current Canadian Farm Income Program. AIDA was available in 1998 and 1999. CFIP is funded under the current framework agreement until the 2002/03 fiscal year. AIDA and CFIP are both whole farm programs and are intended to be complementary to the Net Income Stabilization Account (NISA).

Like AIDA, CFIP is cost shared by the federal and provincial governments on a 60:40 basis. The Federal government administers the program in Saskatchewan, Manitoba, New Brunswick, Nova Scotia and Newfoundland. Provincial Governments administer the program in British Columbia (through the Whole Farm Insurance Program), in Alberta (through the Farm Income Disaster Program), in Ontario (through the Ontario Farm Income Disaster Program), in Prince Edward Island (as the Canadian Farm Income Program) and in Quebec (as the Programme canadien du revenu agricole). Administration costs are shared by the province and the federal government in each case.

Producers apply to CFIP on an annual basis using tax information, as was the case with AIDA. Coverage under the program is based on individual gross margins. A payment is triggered when a producer's claim year gross margin falls below 70% of their average historical margin. The historical margin is calculated based on the greater of either the previous three-year average or the olympic average (previous five year average, dropping the high and low margin years). While producers are not required to share directly in the costs of the program, producers do assume responsibility for losses associated with first 30% of the margin. This portion of the loss may be fully or partially offset through other safety net programs (i.e. NISA, companion programs), provincial programs or, in cases, is simply absorbed by the producer.

As in the case of its predecessor, payments under the CFIP program are capped. The federal share is based on a cap of $175,000 for individuals and $175,000 per shareholder for up to five shareholders in the case of corporations. Caps for provincial shares vary by province. Payments are also linked to the NISA program through the NISA link. The NISA link represents the maximum amount of government contributions a producer can receive under the NISA programs (3% of eligible net sales). Only CFIP payments for producers who participate in NISA are reduced by the NISA link, no one else is affected.

The most significant difference between AIDA and CFIP is that while negative margins were covered under the federal share of the AIDA program, negative margins are not covered under the federal CFIP program. Some provinces are providing negative margin coverage as part of safety net companion funding.

AIDA Payments and Like Program Payments for 1998 and 1999										
	BC	**AB**	**SK**	**MB**	**ON**	**QC**	**NB**	**NS**	**PE**	**NF**
1998 Program	(millions)									
Base Program	$15.6	$148.7	$136.0	$53.5	$81.5	$2.9	$0.6	$2.5	$4.8	$0.1
*Negative Margins**	$2.5	$16.4	$16.3	$7.6	$13.9	-	$1.2	$1.1	$1.5	$0.1
Like programs	-	-	-	-	$8.2	$169.3	-	$3.8	-	-
Total	$18.1	$165.1	$152.3	$61.1	$103.6	$172.2	$1.8	$7.4	$6.3	$0.2
1999 Program										
Base Program	$11.2	$90.0	$223.3	$106.8	$75.8	$5.3	$1.5	$2.0	$6.0	$0.3
*Negative Margins**	$3.2	$25.2	$27.0	$18.4	$24.2	-	$0.6	$1.1	$1.7	$0.1
Like programs	-	-	-	$34.5	$44.1	$222.3	-	$2.0	-	-
Total	$14.4	$115.2	$250.3	$159.7	$144.1	$227.6	$2.1	$5.1	$5.7	$0.4

** Negative margin figures include federal top-ups in each province.*

4.3 Evaluation of Program against Guiding Principles of the Framework Agreement

Framework Principles`	**Program Assessment**
Production and Market Neutrality – Programs should not influence farmers' production and marketing decisions and should not distort regional comparative advantage.	*Incomes arising from the production of all commodities are covered under CFIP. Coverage is based on historical margins and uses a whole farm approach. The program has been designed so as not to influence production decisions by producers or distort markets.*
Trade Neutrality – Programs should minimize countervail risk.	*CFIP was designed to conform with WTO rules to avoid countervail action and is considered to be 'green' under WTO rules.*
Environmental Sustainability – Program should not be adverse to environmental stewardship.	*The CFIP program presents minimal risk to the environment.*
Adaptation and Adjustment – Programs should not be adverse to market-oriented adjustments.	*CFIP provides producers with assistance that does not interfere with any market-oriented risk management program.*
Minimal Overlap and Duplication – Programs should not duplicate purpose and payments.	*Some overlap with the NISA program. The NISA link was added as a means of dealing with the overlap between the two programs.*
Minimal Moral Hazard – Programs should minimize moral hazard.	*Some moral hazard is associated with the program as it provides incentive to increase expense levels to reduce current year margins. This can be mitigated to some extent with adequate administration and vigilant auditing.*

Funding Principles	
Non-Distorting Distribution of Government Funds – Allocation of funding should not be distorting to regional/commodity comparative advantage.	*The program uses a whole farm approach – income from all agricultural commodities is covered under the CFIP. Funding is provided based on need, providing support based on recent historical average margins.*
Cost-Sharing – Producers and both orders of government should share program costs, including premiums, deficits and administration.	*CFIP is cost-shared by provincial and federal governments. Producers do not share in the costs of the program.*
Capping – There shall be limits on the level of assistance provided to individual producers.	*The federal share of payments is capped at $175,000 per individual and $175,000 per shareholder for up to five shareholders in the case of corporations. Caps on provincial shares vary by province.*
Equity – The financial resources of the Government of Canada should be allocated to provide, over time, the same level of protection for farmers in similar circumstances.	*Payments under the program are based on a support level of 70% of an average historical margin. Any producer that falls below the support level triggers a payment. The NISA link and links to other programs ensure that there is no duplication of payments.*

4.4 Overall Importance of the Program to Producers

- CFIP provides support to producers experiencing declines in farm incomes that exceed 30%. Coverage is available to all producers and all agricultural commodities are covered under the program. No historical participation is necessary and coverage levels remain at 70% regardless of whether the producer received payments in previous years. CFIP is the only program within the safety net package to provide every producer in Canada with this level of margin-related coverage.

- More than 29,000 claims, averaging $17,100 per claim, were paid to producers across the country under AIDA in 1998. Payments totaled $450 million under the basic program with an additional $60 paid for negative margins and federal top-ups.

- Under the 1999 program, 30,000 claims were paid to producers who received $20,100 on average. In total, $603.8 million is expected to be paid out under the program with $506.4 million being paid out under the basic program and an additional $97.5 million paid for negative margins and federal top-ups.

4.5 Concerns Raised about the Program by Producers

- The programs are complicated. Payment and coverage is uncertain because many adjustments may take place; ie reference period if changing production or ownership structure.
- Considerable cost (ie. paying accountant) to apply and may not get anything out of it.
- It doesn't pay out enough for a drop in income that is significant to the producer but less than 30%.
- Offsetting losses in one enterprise with another enterprises is unfair, especially when this is not done for off-farm income.
- Producers don't agree with combining farms (offsetting one persons claim with another family member's income) just because some transactions are shared.
- Coverage does not reflect current farm's operations as structural adjustment calculation is imperfect.
- Do not subtract the NISA contribution
- Reduce the time frame to establish payment eligibility and issue payment.
- Enable the calculation of a deemed reference margin by CFIP administrators for producer who have been affected by successive years of poor crops and resulting low income.
- Use a variable or longer period than three years to compute an average to determine program margins.
- Negative margins should be covered.
- The programs are not properly linked. The link should be of the type that existed for AIDA in 1998 and 1999, (i.e. ENS deduction of 3% from AIDA payment, regardless of whether the producer participates in NISA or not). Quebec wants the same type of link with crop insurance. It wants the programs to be linked in such a way as to encourage participation in these programs.
- Program treatment of diversified vs. specialised farms creates a disincentive to diversify.
- Payments are viewed as arbitrary.
- There should be more benefits to those that do not take other actions to reduce risk and stabilize income.

4.6 An initial empirical analysis of AIDA based on 1998 and 1999 data - AIDA Federally

Goals and Principles of the Program:

The AIDA program was established to make assistance available to those producers who, through circumstances beyond their control, experienced a drastic reduction in farming income relative to their historical income. The program was designed to provide support to a producer when their claim year gross margin dropped below 70% of their historical reference margin (average gross margin over either the preceding three years or within the preceding five years).

AIDA was intended to provide short-term targeted support that was not available through other existing safety net programs. AIDA support was intended to be unique, in that coverage up to 70% of a producer's historical return was made available to all producers in Canada. At the same time, the funding was to be complementary and not redundant to other funding that was already available.

AIDA was also intended to be consistent with WTO agricultural trade guidelines. Therefore, the goal of the program was to provide support that a) was equitable to all producers across Canada, b) was non-sector specific (whole farm), c) did not affect production or marketing decisions, d) did not deter producers from using private risk-management tools, and e) did not provide full coverage for a producer's price and production risks.

Did the Program Achieve Its Goals?

For many applicants, the program represented and important source of funding to help them deal with income problems. Given the number of qualifying applicants and the magnitude of the amount paid, the AIDA program clearly responded for those producers whose claim year margin fell below 70% of their reference margin. Whether the program delivered sufficient assistance to help solve these producers' cash flow problems needs to be further explored. It is assumed that AIDA payments brought qualifying applicants' claim year margin back up to the 70% of their reference margin (less the NISA linkage that is deducted for potential government contributions available through NISA). Initial observations where AIDA is federally delivered indicate that on average, basic AIDA payments brought applicants up to approximately 60-65% of their reference margin (see Fig. 1). With the addition of negative margin coverage, applicants were brought up to approximately 73-75% of their reference margin. Further analysis is required to determine how the NISA linkage, individual payment caps, covering negative margins at 70% instead of 100%, and other factors affected the impact AIDA payments had on producers' margins.

The AIDA program was designed to provide assistance to producers experiencing a sudden loss of income due to circumstances beyond their control. It is not designed to provide payments to all farmers or all producers in a specific sector of agriculture in a particular year. Other programs such as NISA are much more effective at distributing dollars in an equitable manner. It should be noted that comparisons of average payments across sectors and provinces are interesting, but may be difficult to interpret. Payments are based on individual farm circumstances and reflect the farm's past financial performance and current financial performance to determine payment levels. Since no two farms are exactly the same, no two farms received exactly the same benefit.

Applicants Who Received Payments Under the Program

Over the two years of the program, AIDA paid over $1.1 billion to 59,677 producers. In the provinces where AIDA was administered federally (Saskatchewan, Manitoba, Nova Scotia, New Brunswick, and Newfoundland), 15,714 producers were paid over $220.3M in 1998, while 19,733 producers were paid over $368.0M in 1999. In the provinces where AIDA was administered provincially (British Columbia, Alberta, Ontario, Quebec, and Prince Edward Island), 14,044 producers were paid over $305.4M in 1998, while 10,186 producers were paid over $242.5M in 1999.

Farms of all sizes in all provinces received AIDA payments. In provinces where AIDA was federally delivered, significant payments were issued to farms in all three sales classes: hobby farms (with sales less than $10,000), small farms (with sales of $10,000 to $100,000), and commercial farms (with sales in excess of $100,000) (see Fig. 2). While the majority of qualifying applicants belong to the small farm size class, the majority of payments went to commercial size farms. In both program years, while small farms represented approximately 60% of the qualifying applications, commercial farms received over 60% of the total payments.

Average payments on whole were also observed to increase with increasing farm sales (see Figs. 3 and 4). This is to be expected, for although the support level is the same across all farms, the absolute loss on an individual basis is much larger for large farms. Average payments to commercial hog, horticulture, and mixed farms tended to be greater than average payments to other farm types of similar size. This could be due to a multitude of reasons including the intrinsic nature of these industries (economies of scale, more drastic income declines, less diversification) as well as the smaller sample size of large farms. However, to better understand the reasons for this, further analysis would be required.

Farms of all types in all provinces received AIDA payments. Where AIDA was federally delivered, six different categories (cattle, grains and oilseeds, hogs, horticulture, mixed, and other, as defined by individual sales > 51% of that commodity) received significant payments (see Fig. 5). The majority of money went to grain and oilseed farms, as applicants with greater than 51% of revenues from grain and oilseed sales accounted for 80% of all qualifying applicants in both years, and accounted for over 67% of all payments in both years.

Hog producers tended to receive relatively more support on average in 1998 (see Fig. 5). Although producers with greater than 51% of revenues from hog sales represented only 4% of all qualifying applicants in 1998, they received 14% of total payments that year. This seems to indicate that the program did respond to the hog price drop in 1998. Moreover, although the majority of payments in each farm size class were dominated by grain and oilseed farms (see Fig. 6), payments to hog farms tended to become greater with increasing farm size. It should be noted that any comparison of farm types in a particular year tends to be biased by the sector that was most affected by a disaster during that year (e.g., hog price decline in 1998). Given a longer time frame of observations, the distribution of payments among sectors will vary in a particular year.

Where AIDA was federally delivered, the overall qualifying rate in 1998 was 43%, while the overall qualifying rate in 1999 was 55% (see Fig. 7). The increase in the rate in 1999 may in part be attributed to the enhancements that were made to the 1999 program guidelines (i.e. Olympic average reference margin). Qualifying rates for smaller farms were greater than those of larger farms while qualifying rates for hog farms tended to be greater than other farm types. Further analysis is required to determine what factors influenced the qualifying rates.

Applicants Who Did Not Receive Payments Under the Program

Where AIDA was federally delivered, 37,003 out of a total of 72,450 applications received in both years did not qualify for a payment. In the provinces where AIDA was provincially delivered, 9,485 out of a total of 33,715 applications received in both years did not qualify for a payment. Producers who did not receive payments under AIDA can be grouped into the following categories:

- Producers who had an increase in claim year income and margin. Initial observations on data where AIDA is federally delivered indicates that individuals who did not qualify tended to have slightly lower reference margins than those individuals who did qualify. However, the primary reason for ineligibility is due to applicants having *an increased claim year margin relative to their reference margin* (see Figs. 8a and 8b). AIDA targeted assistance at producers that experienced a decline in margins of greater than 70% of their reference margin. These producers clearly did not meet these criteria.

- Producers who experienced a relatively small reduction in income or margin (i.e. less than 30% of their reference margin less the NISA linkage). Based on WTO guidelines, the 70% support level was established, as AIDA was not intended to cover the full spectrum of a producer's risk/loss. Furthermore, safety nets were supposed to be cost shared between the producer and governments. Since producers did not contribute directly to AIDA, the program was designed in a such a way that the producer would absorb a loss of income equal to 30% of the reference margin.

- Farmers with no support level (i.e. a reference margin of zero or less). Federal coverage of negative margins was offered under AIDA, however provincial coverage was offered only in some provinces. Coverage of negative margins did increase costs significantly, as over $150 million in negative margin payments were issued over the two years of the program.

The proportion of producers falling into each category will vary from year to year. The exception is those who have prolonged low income, and/or those excluded due to the program conforming with WTO guidelines.

Other Issues

Apart from whether AIDA achieved its goal of providing assistance to fulfill a specific need, consideration must also be given to whether a program such as AIDA will fulfill its objectives of remaining equitable to all producers, trade neutral, and consistent with WTO guidelines. Some of the related concerns are listed below:

- CFIP does not differentiate its assistance based on management practices with the exception that an individuals support level is based on their own history thereby providing higher support to farmer that use management practices that result in higher margins. It is quite possible for producers to have similar support levels but different risk management practices. Given the design of the program a producer that takes higher levels of risk can incur a loss and receive support through CFIP that takes them to the same income level as a producer that mitigates the loss using risk management tools or practices. This may lead to either a reduction in the use of some risk management tools, may slow the adoption of some risk management strategies or may simply be perceived as being inequitable. In the long run, this inequity may be offset to some degree, as the relative support levels will change.

- Because the program compensates dollar for dollar between 0% and 70% of the reference margin, there is the potential for moral hazard. Producers who know that they will qualify could spend extra on family wages or perform major repairs (overhauls, renovations, etc.), knowing that they could recover the additional expenses through the program. *These issues can be addressed to a large extent by a) making payments on a percentage basis rather than on a dollar for dollar basis, and b) removing items from allowable expenses that have moral hazard potential (wages) or unlikely to drive a disaster (accounting and legal fees, office expenses, etc.).*

- The program may in fact encourage enterprise splitting so as to increase payments. In some cases, this loophole has been reduced by requiring individual shareholders to apply and include any other non-corporate farm income they receive. Further analysis should be done to examine other ways that this issue can be resolved administratively.

- Many producers who report on the cash basis use it to average their income for tax purposes as much as possible. This shows in that many cash margins stay relatively constant even if there was a significant payment in one of those years. On one hand, this is beneficial in that it keeps the reference margin relatively constant. On the other, it is detrimental in that a bad year is not reflected in the reference margin.

- It should be noted that measuring a producer's disaster has proven to be very difficult. Where AIDA was federally delivered, preliminary field audits have indicated a material change rate of over 88% to payment files. This suggests that measuring and verifying margins is extremely difficult. Therefore, despite thorough and systematic desk verification, a significant number of applications have later been determined (through post-audit) to be inaccurate. Also, nearly as many applications were underpaid as overpaid, indicating that producers' source inventory records and understanding of gross margins in general are extremely poor. The difficulty in determining these figures is also evidenced through the significant dollars spent nationally on administering disaster-based safety net programs. Further analysis is required on this issue.

- In order to match revenue and expenses related to claim year production, AIDA performs a modified accrual adjustment to account for changes in a producer's inventories, receivables, and payables. Even though the adjustment is as fair as possible, it is not necessarily reflected in the subsequent cash statement. Not only is the adjustment difficult for many farmers to understand, but it is also poses a large verification risk as many producers have very poor records to support inventory and production information.

- Producers with different year-ends may be affected differently. If the fiscal year-end is in the middle of a crop marketing year, then the price effect, positive or negative, is averaged over two fiscal periods (i.e. leads to much less extreme fluctuations in income compared to those operations where the fiscal, production and marketing years correspond).

- Some producers may not have applied to the program due to the apparent complexity of the application process. Given the nature of the program, the bulk of the information that was requested from an applicant was necessary to ensure that the program targeted support according to its guiding principles. Nonetheless, further work is needed to examine ways in which the application process can be simplified and/or streamlined.

Negative Margins

Negative margins refer to the portion of allowable operating expenses that are not covered by agricultural revenues. There are many implications to giving broad coverage of negative margins. In addition to significant increases in program costs, this coverage impacts other risk management tools and practices, moral hazard and provides funds to hobby farms that would have their negative margins covered by off farm income.

There are circumstances where negative margin coverage may be desirable by governments. This may be where commercial farms go negative due to a severe price shock or a weather disaster that could not be reasonably covered using prudent risk management practices. One way to avoid the problems associated with broad negative margin coverage while addressing these circumstances has been to provide assistance outside of disaster programming which targets those affected or by offering a premium based negative margin program.

The following table indicates the number of producers that received payments from negative margin coverage in the AIDA program.

	Applicants that only have positive margin losses.	Applicants that have positive and negative margin losses	Applicants with only negative margin losses
# of producers	11,475	6,950	955
Average Current Year Margin	$21,004	($14,595)	($16,467)
Average support level	$40,792	$21,404	($2,752)

4.6 1999 AIDA Program Changes - Provincial Positions

	Initial Payment %	Negative margins	Olympic average	Modified Accrual	Expansion	Inventory P_1P_2 or P_2	Family Labour	CWB Adjustment
CAN	80%**	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
BC	100%	No	Yes (also zeroing out negatives in reference years)	No (allow MIA/OIA in claim year)	No	No (currently use a similar 'actual values' method for horticulture)	No	No (currently use a similar 'actual values' method for horticulture)
AB	100% (of claim - fed share, but not including top ups)	No	No-using best 3 of 5 (also zeroing out negatives in reference years)	No (allow MIA/OIA in claim year)	Yes	No	No	No
SK*	80%	No	Yes	Yes	Yes	Yes	Yes	Yes
MB*	70%	No	Yes	Yes	Yes	Yes	Yes	Yes
ON	100%	No (are reducing NISA ENS link by ½)	Yes	Yes	Yes	No	Yes	Yes (for Ontario Wheat Board)
QC	80%	Yes	Yes	No (but will allow full accrual where financial statements are available).	Yes	No (will allow P_1P_2, if used to value all production - will not provide as a choice.)	Yes	N/A
NB*	80%	No	Yes	Yes	Yes	Yes	Yes	N/A
NS*	80%	Yes	Yes	Yes	Yes	Yes	Yes	N/A
PE	100%	Yes	Yes	Yes (same in principle)	Yes (same in principle)	No (apply various methods on a case by case)	Yes	N/A
NF*	50%*	Yes	Yes	Yes	Yes	Yes	Yes	N/A

* *AIDA Program delivered by the federal government (authority for NF is still outstanding)*
***Canada has currently authorized an 80% initial payment for the federal share, each province has set their own initial percentage for their provincial share)*
Note: the federal share of AIDA funding is delivered consistently in all provinces. *See attached notes for more information*

Notes - 1999 Claim Year

Initial Payment Percentage: Given the fixed pool of funds available, an initial federal payment percentage has been established at 80%. This percentage is based on current cost estimates for the 1999 claim year, the initial payment may increase as they year progresses and more data becomes available. Similarly provinces have established initial payment percentages.

Negative Margin Coverage: for the 1998 and 1999 claim years, producers' negative margins will be covered up to 70% (or 42% where provinces do not contribute see note on initial payment above). Negative margins occur when a farm has a particularly bad year and the operation's variable costs, like fuel, machinery repair and chemicals, exceed agricultural revenues. At the inception of the AIDA program, these negative amounts in the claim year were not covered, instead coverage was provided up to zero, but not for the negative portion. Conversely, negative amounts in the reference years were counted at the negative value.

In British Columbia and Alberta, the provinces have decided not to cover claim year negative margins. As a concession these provinces have decided to count all negative margins in the reference years as zero, thereby increasing support levels.

In Ontario, the province has chosen not to cover negative margins. Instead they have reduced the amount (by half) deducted from AIDA payments under the "NISA Linkage". The NISA linkage is defined as 3% of Eligible Nets Sales (ENS) and is designed to prevent duplicate program payments for the same income shortfall. The standard NISA Linkage of 3% of ENS represents the amount of annual government contributions producers can receive from NISA. As a result, Ontario will rebate 1.5% (half) of ENS to producers.

"Olympic Average" Choice of Reference Period - Originally, the AIDA Program support level (reference margin) was based on the gross margin average for the three previous years. For the 1999 claim year the reference margin will be based on either the previous 3 years, or the middle 3 of the previous 5 years (where the high and low margin years are not counted).

The province of Alberta has opted instead to use the "best" or highest 3 of the 5 previous years.

Family Labour - All salaries and wages will be treated as an "allowable expense" for the purposes of calculating program margins. Previously non-arm's length (family) salaries were not deducted from income in the calculation of a producer's margin (i.e. they were treated as a non-allowable expense).

Modified Accrual for all Farms - Producers will have the option to use a modified accrual accounting method for calculating the reference margin (1996~98). Previously these adjustments were only performed on the claim year but not made to the reference years (unless the farm had undergone a significant expansion). These "modified accrual" adjustments are made to the cash income reported for tax purposes. The specific adjustments to income include: crop and livestock inventory, payables, deferred income and receivables.

The main component of these adjustments involves inventory. In Alberta and British Columbia, provinces are already accepting similar adjustments referred to under the Income Tax Act as Optional Inventory Adjustments (OIA) and Mandatory Inventory Adjustments (MIA). The OIA and MIA adjustments and the Modified Accrual Option are very similar in principle in that they are both designed to provide a more accurate picture of the cash income reported for tax purposes.

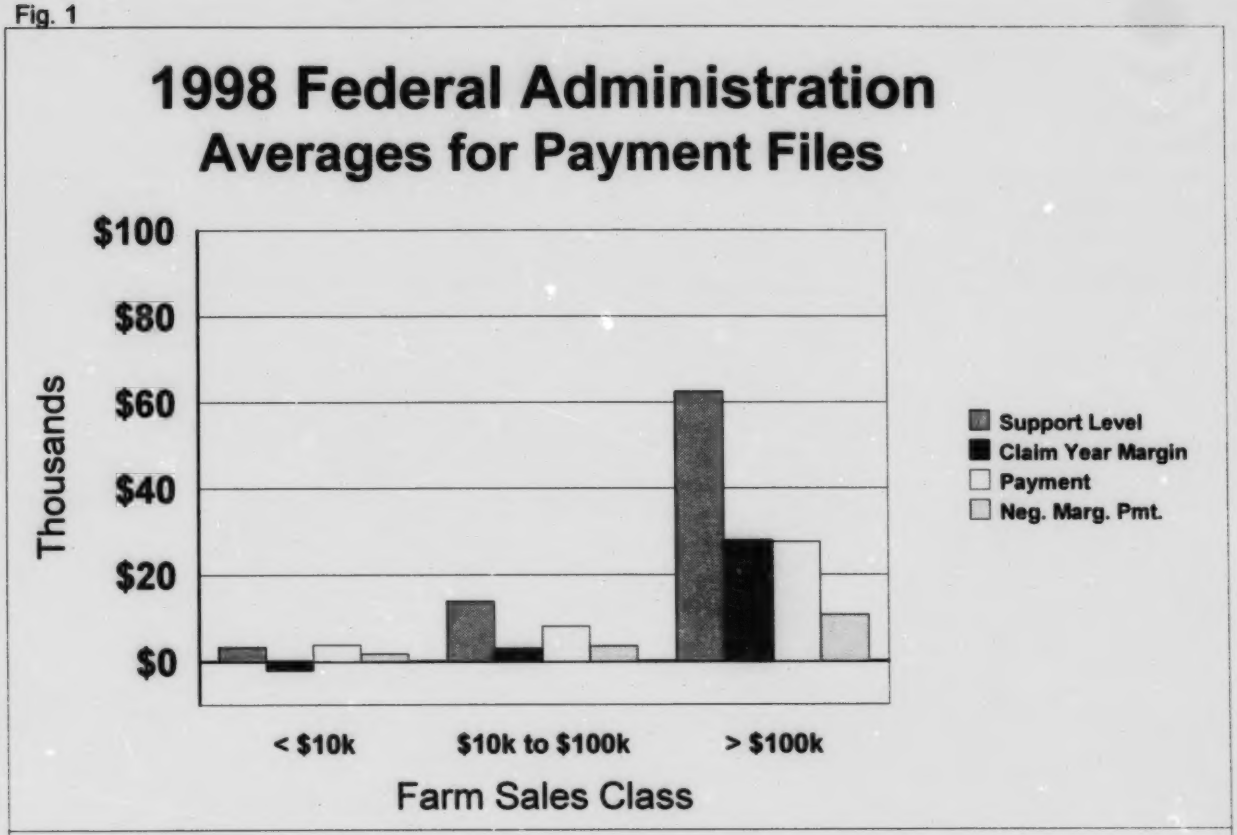
Expanding Farms - Where producers have significantly expanded their farming operation, the AIDA Administration will adjust program margins to account for the increased size of the farm.

Canadian Wheat Board Adjustment - In prairie provinces (and BC peace region): The full value for a particular sale through the CWB pooling system is paid out over an 18 month period. For the 1999 claim year, the Administration's first approach was to value CWB inventory using initial prices with no accrual adjustments. Since then an optional adjustment has been made available that combines the initial price with a modified accrual adjustment to more accurately value CWB grains. The objective of this schedule is to bring CWB revenues more in line with production in the claim year.

4.7 Evolution of disaster program features (federal guidelines)

	1998 AIDA	1999 AIDA	2000 CFIP
Negative claim year margin (CYM) coverage	Coverage provided at 70% of difference between support level and CYM.	Coverage provided at 70% of difference between support level and CYM.	No coverage. Negative CYM zeroed. However, NISA link applied (used) against negative CYM prior to it being zeroed.
Reference margin options	- Prior 3 year avg. - Modified accrual accounting option (MAAO) for expanding farms	- Prior 3 year avg. - Olympic average (middle 3 margin years of previous 5) - MAAO available to all farmers	- Prior 3 year avg. - Olympic average - MAAO available to all farmers
Expansion	Addressed through MAAO.	Addressed through structural change adjustment (prior year margins adjusted to reflect CYM).	Addressed through structural change adjustment (prior year margins adjusted to reflect CYM).
Inventory valuation	End of year price used to value change in inventory $[(I_2-I_1) \times P_2]$.	Start-of-year inventory valued at start-of-year price; end-of- year inventory valued at end-of-year price $[(I_2 \times P_2) - (I_1 \times P_1)]$.	End of year price used to value change in inventory $[(I_2-I_1) \times P_2]$.
Family labour	Non-arm's length salaries excluded from margins.	All salaries and wages included in margins.	All salaries and wages included in margins.
NISA link	Deduction equivalent to 3% of producer's ENS in the claim year.	Deduction equivalent to 3% of producer's ENS in the claim year.	Deduction equivalent to 3% of producer's ENS in the claim year for NISA participants only; deduction applied against negative CYM (if applicable) prior to zeroing of CYM.
Adjustment for pooled commodities	None.	Full value of claim year crop approximated through receivables adjustment (RAPC)	Full value of claim year crop approximated through receivables adjustment (RAPC); must be used in back-to-back years to prevent double-coverage

Fig. 1


1998 Federal Administration
Averages for Payment Files
$100
$80
$60
$40
$20
$0
Thousands
< $10k
$10k to $100k
> $100k
Farm Sales Class
Support Level
Claim Year Margin
Payment
Neg. Marg. Pmt.

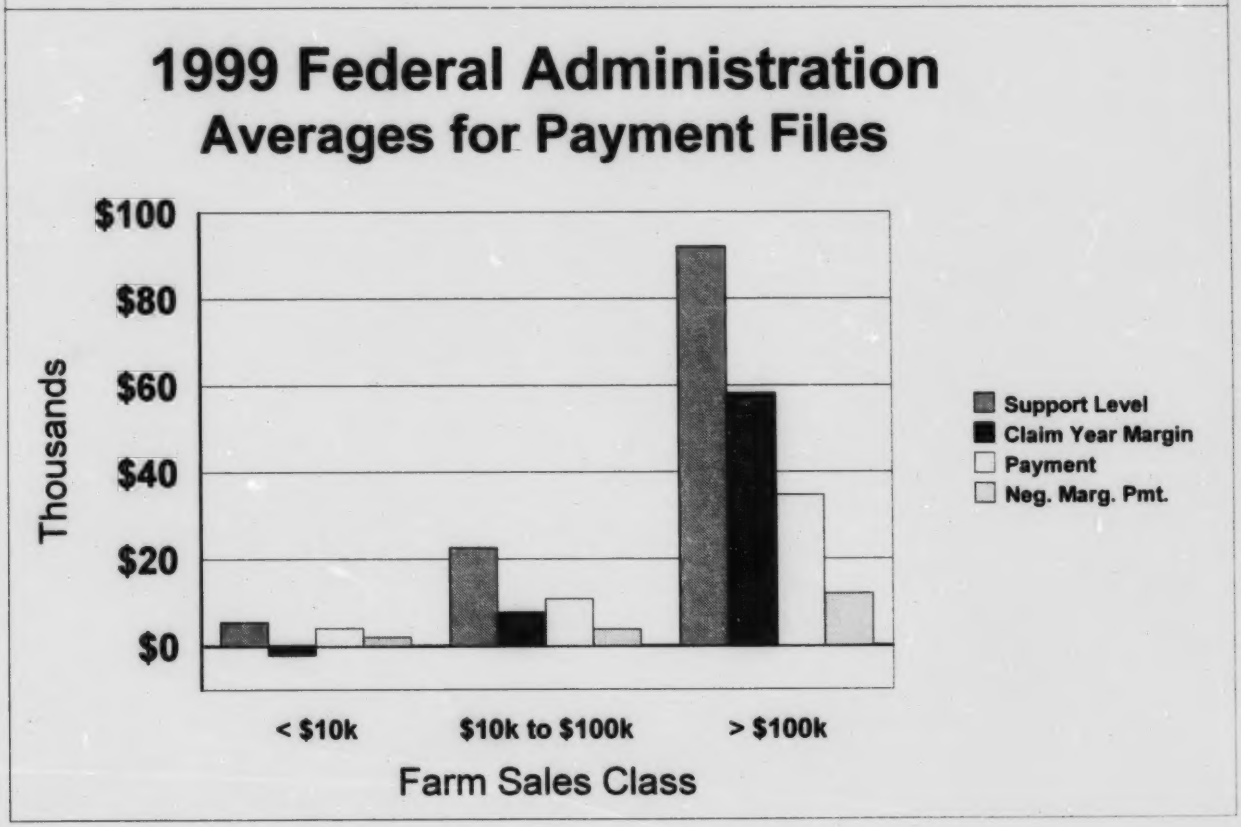

1999 Federal Administration
Averages for Payment Files
$100
$80
$60
$40
$20
$0
Thousands
< $10k
$10k to $100k
> $100k
Farm Sales Class
Support Level
Claim Year Margin
Payment
Neg. Marg. Pmt.

Fig. 2

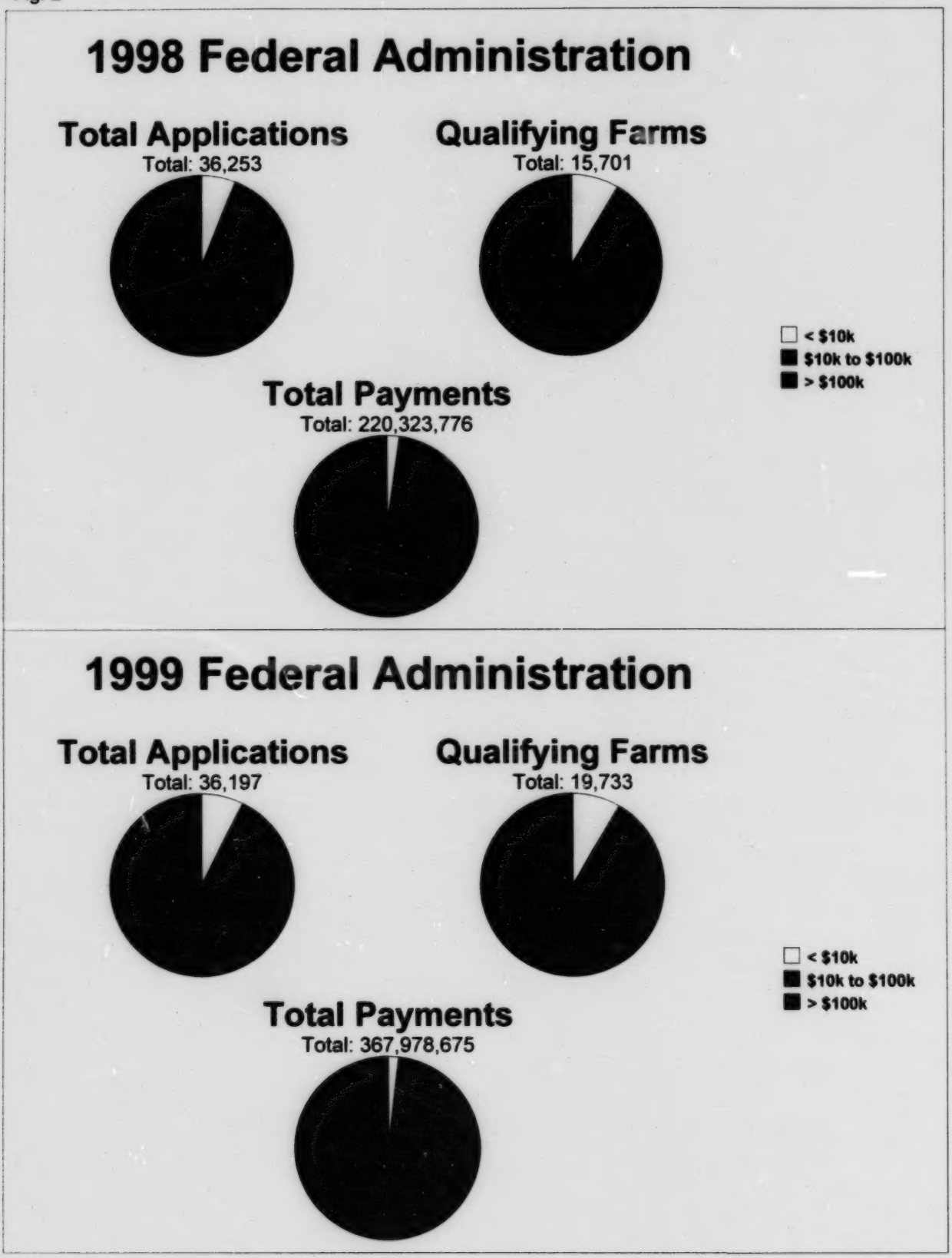
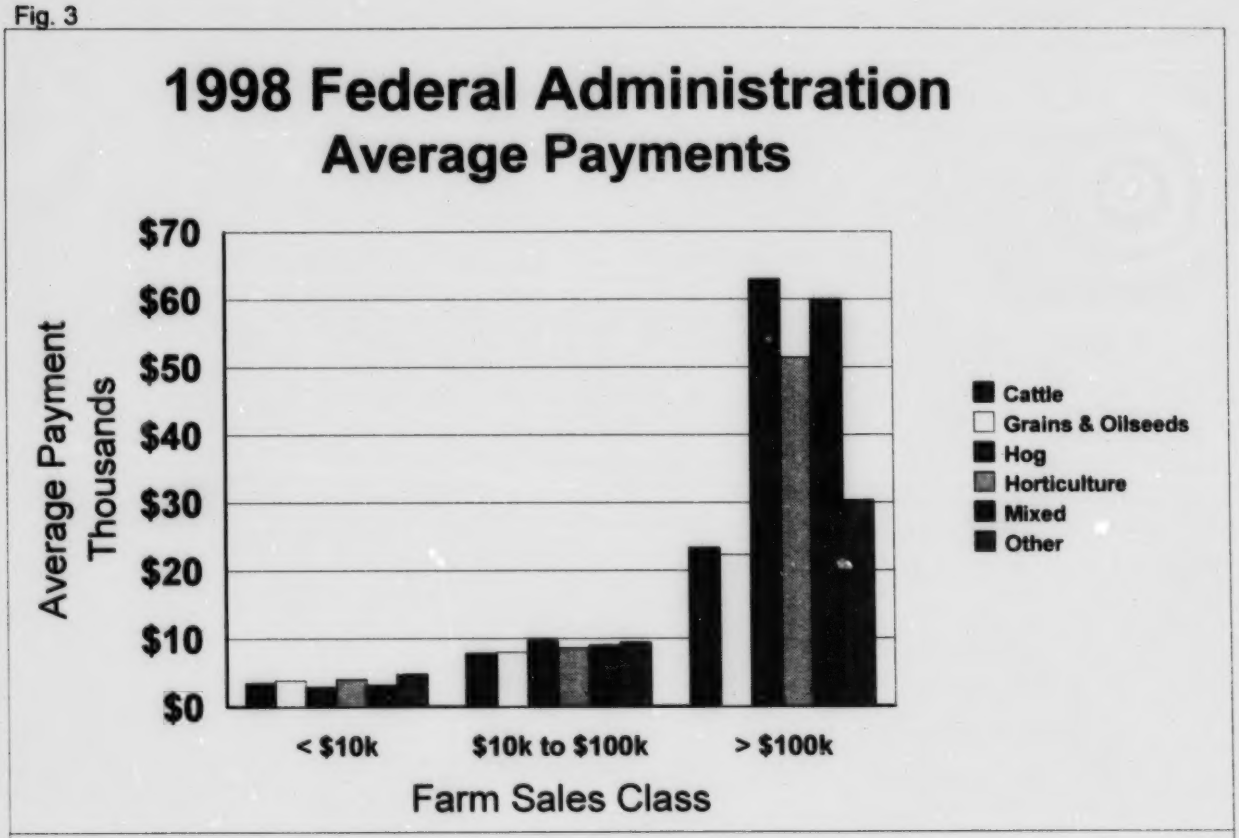

1998 Federal Administration
Total Applications
Total: 36,253
Qualifying Farms
Total: 15,701
Total Payments
Total: 220,323,776
< $10k
$10k to $100k
> $100k
1999 Federal Administration
Total Applications
Total: 36,197
Qualifying Farms
Total: 19,733
Total Payments
Total: 367,978,675
< $10k
$10k to $100k
> $100k

Fig. 3


1998 Federal Administration
Average Payments
$70
$60
$50
$40
$30
$20
$10
$0
Average Payment
Thousands
< $10k
$10k to $100k
> $100k
Farm Sales Class
Cattle
Grains & Oilseeds
Hog
Horticulture
Mixed
Other

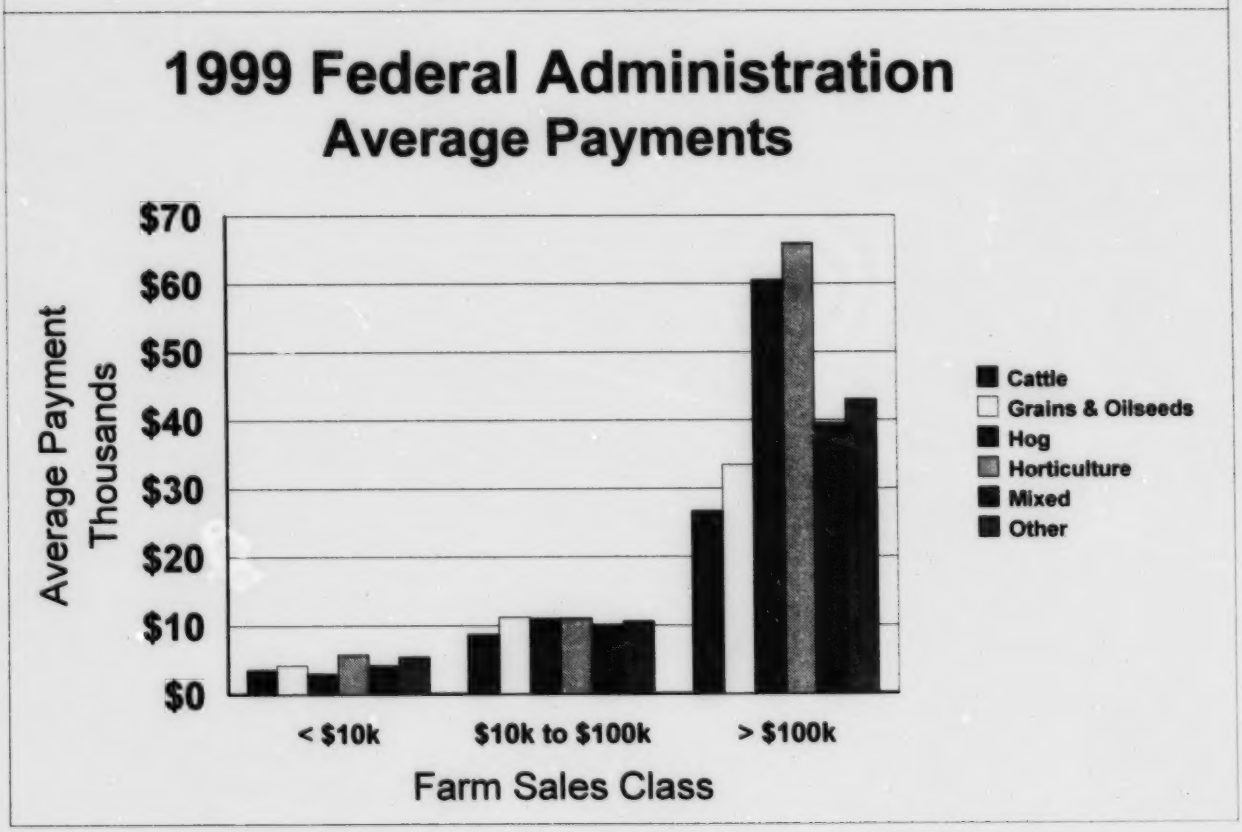

1999 Federal Administration
Average Payments
$70
$60
$50
$40
$30
$20
$10
$0
Average Payment
Thousands
< $10k
$10k to $100k
> $100k
Farm Sales Class
Cattle
Grains & Oilseeds
Hog
Horticulture
Mixed
Other

Fig. 4

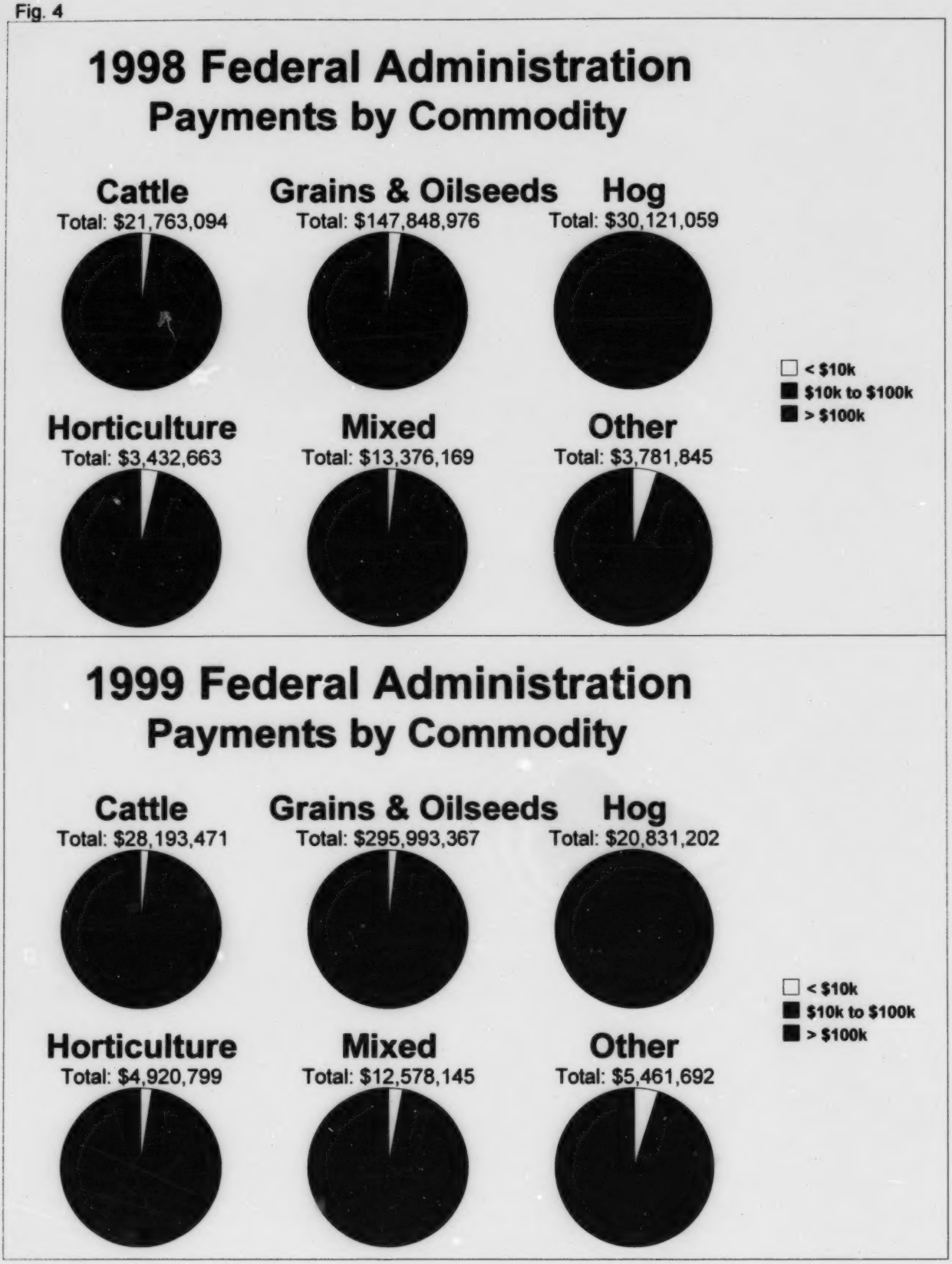

1998 Federal Administration
Payments by Commodity
Cattle
Total: $21,763,094
Grains & Oilseeds
Total: $147,848,976
Hog
Total: $30,121,059
Horticulture
Total: $3,432,663
Mixed
Total: $13,376,169
Other
Total: $3,781,845
< $10k
$10k to $100k
> $100k
1999 Federal Administration
Payments by Commodity
Cattle
Total: $28,193,471
Grains & Oilseeds
Total: $295,993,367
Hog
Total: $20,831,202
Horticulture
Total: $4,920,799
Mixed
Total: $12,578,145
Other
Total: $5,461,692
< $10k
$10k to $100k
> $100k

Fig. 5

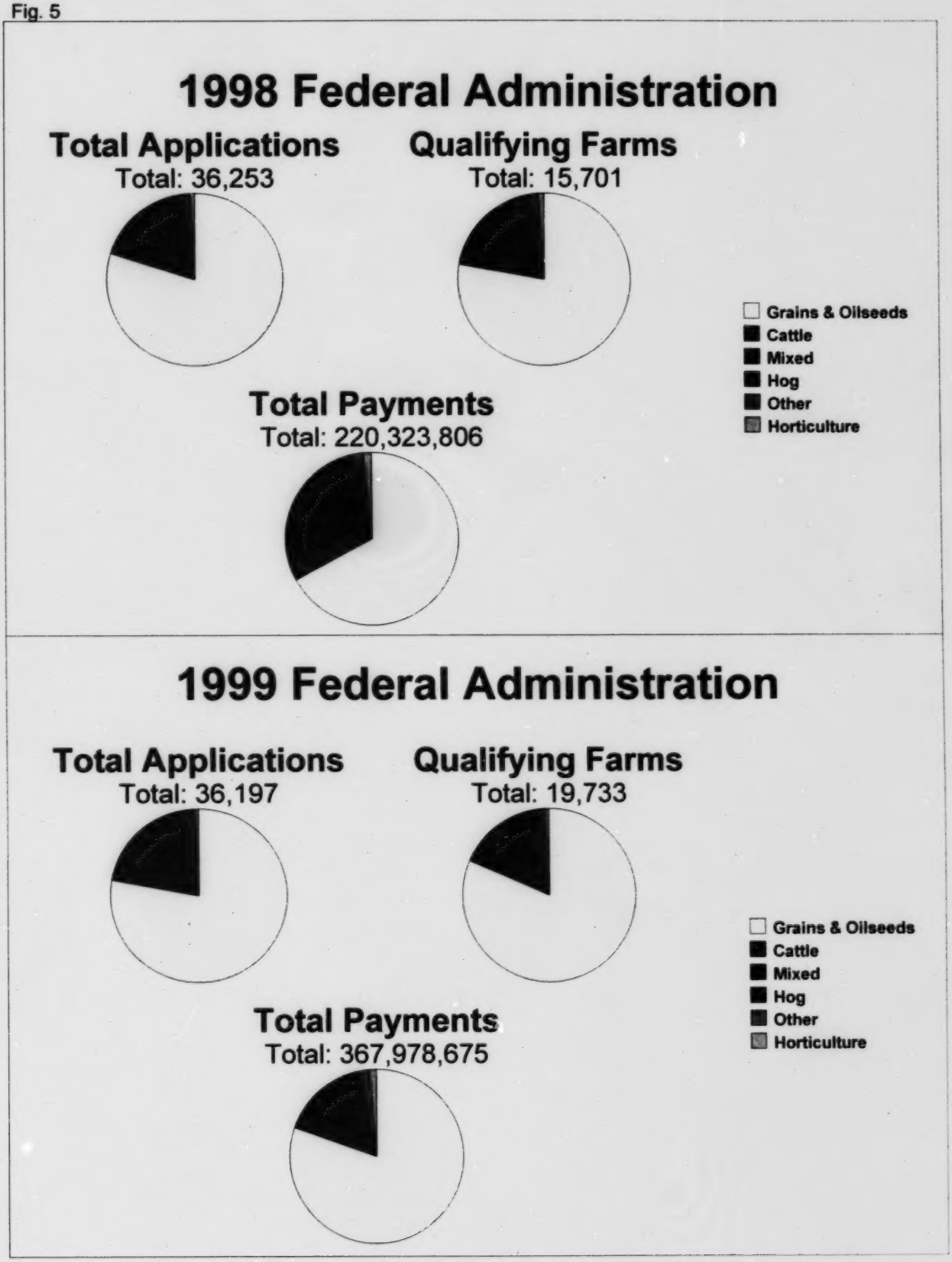

1998 Federal Administration
Total Applications
Total: 36,253
Qualifying Farms
Total: 15,701
Total Payments
Total: 220,323,806
Grains & Oilseeds
Cattle
Mixed
Hog
Other
Horticulture
1999 Federal Administration
Total Applications
Total: 36,197
Qualifying Farms
Total: 19,733
Total Payments
Total: 367,978,675
Grains & Oilseeds
Cattle
Mixed
Hog
Other
Horticulture

Fig. 6

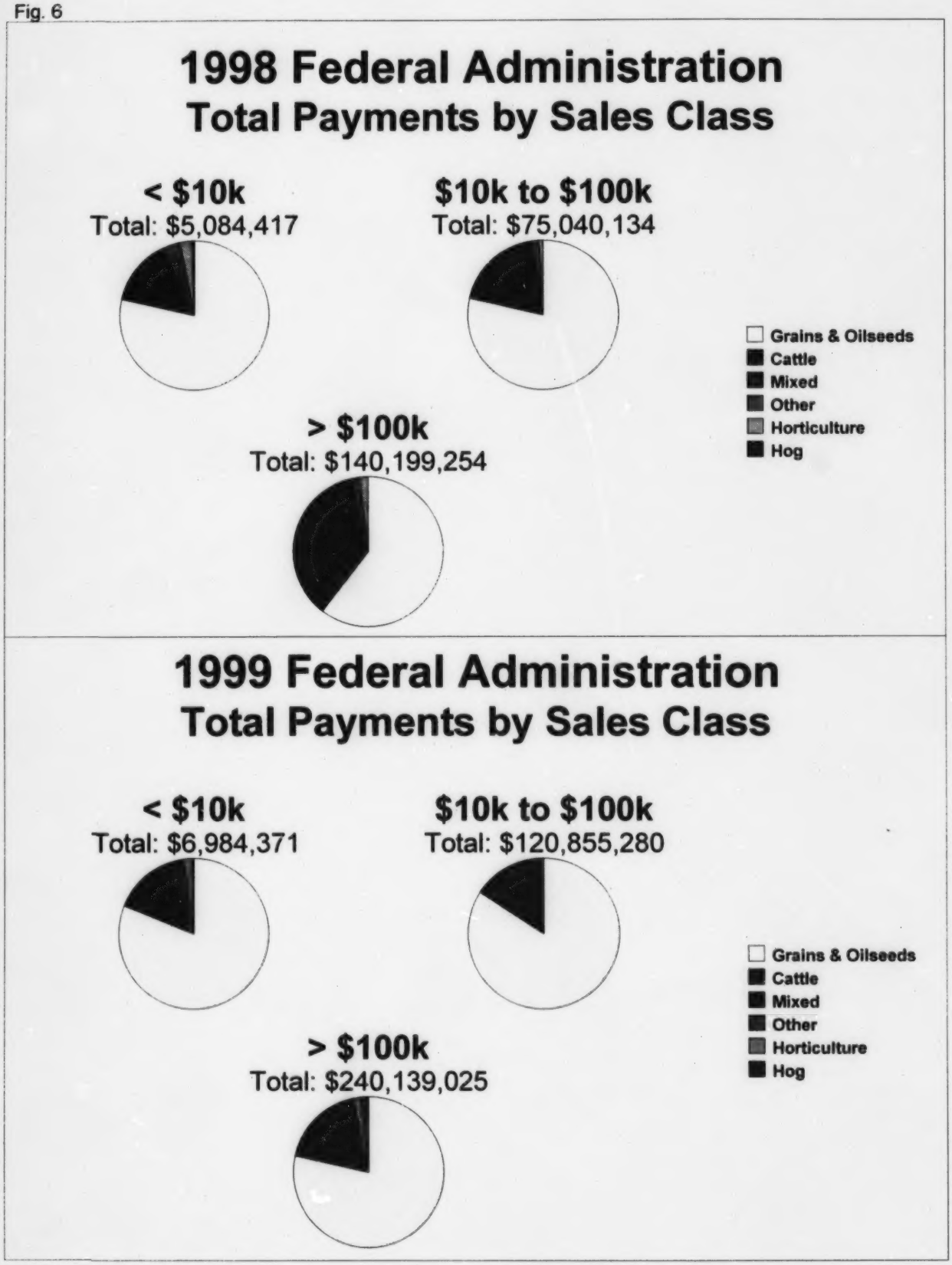
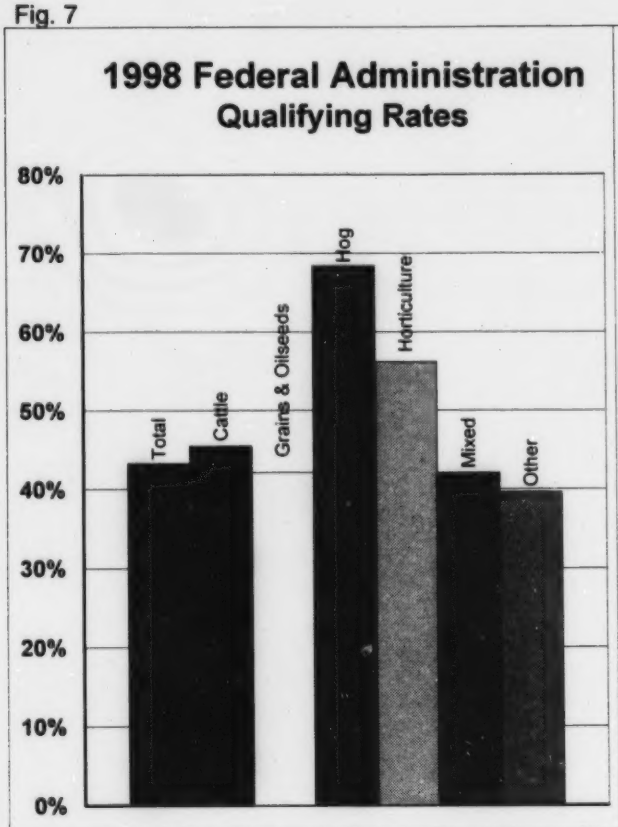
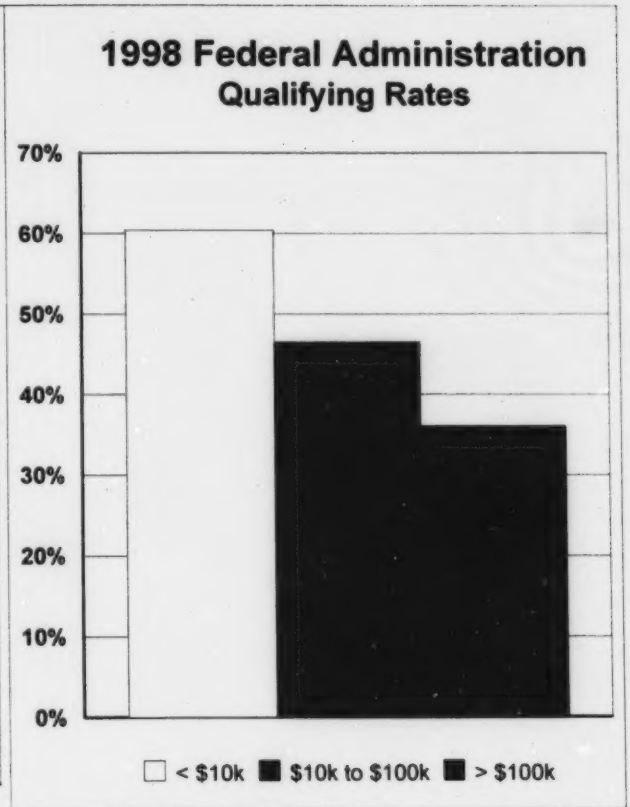
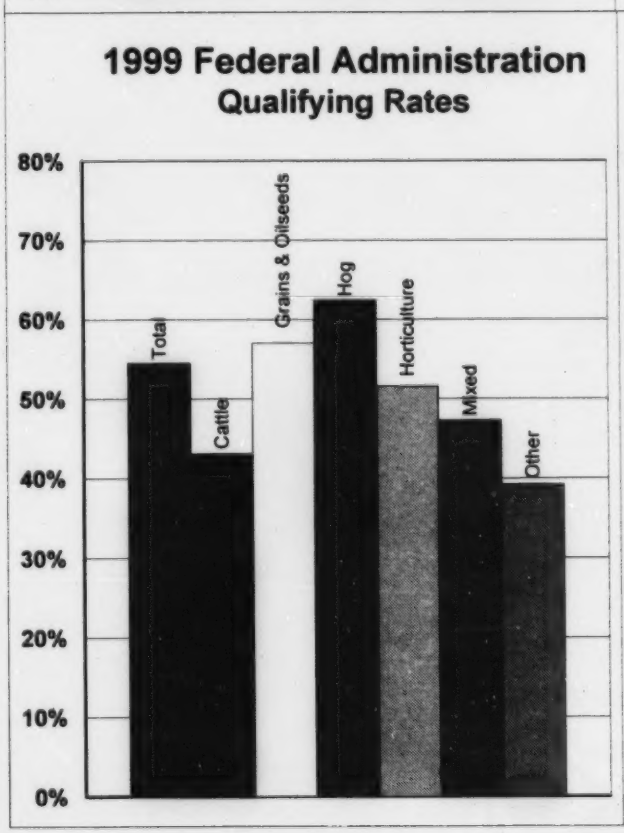

1998 Federal Administration
Total Payments by Sales Class
< $10k
Total: $5,084,417
$10k to $100k
Total: $75,040,134
> $100k
Total: $140,199,254
Grains & Oilseeds
Cattle
Mixed
Other
Horticulture
Hog
1999 Federal Administration
Total Payments by Sales Class
< $10k
Total: $6,984,371
$10k to $100k
Total: $120,855,280
> $100k
Total: $240,139,025
Grains & Oilseeds
Cattle
Mixed
Other
Horticulture
Hog

Fig. 7


1998 Federal Administration
Qualifying Rates
80%
70%
60%
50%
40%
30%
20%
10%
0%
Total
Cattle
Grains & Oilseeds
Hog
Horticulture
Mixed
Other


1998 Federal Administration
Qualifying Rates
70%
60%
50%
40%
30%
20%
10%
0%
< $10k
$10k to $100k
> $100k


1999 Federal Administration
Qualifying Rates
80%
70%
60%
50%
40%
30%
20%
10%
0%
Total
Cattle
Grains & Oilseeds
Hog
Horticulture
Mixed
Other

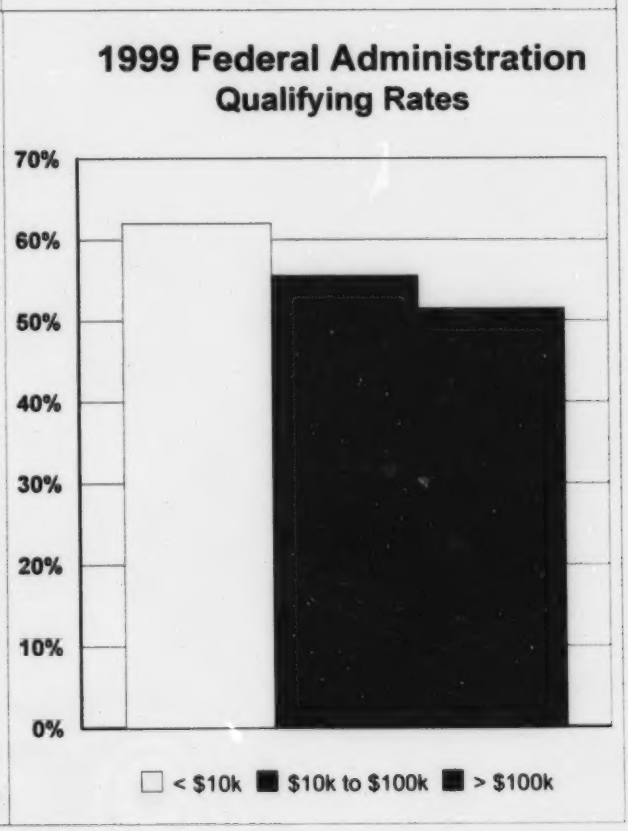

1999 Federal Administration
Qualifying Rates
70%
60%
50%
40%
30%
20%
10%
0%
< $10k
$10k to $100k
> $100k

Fig. 8a

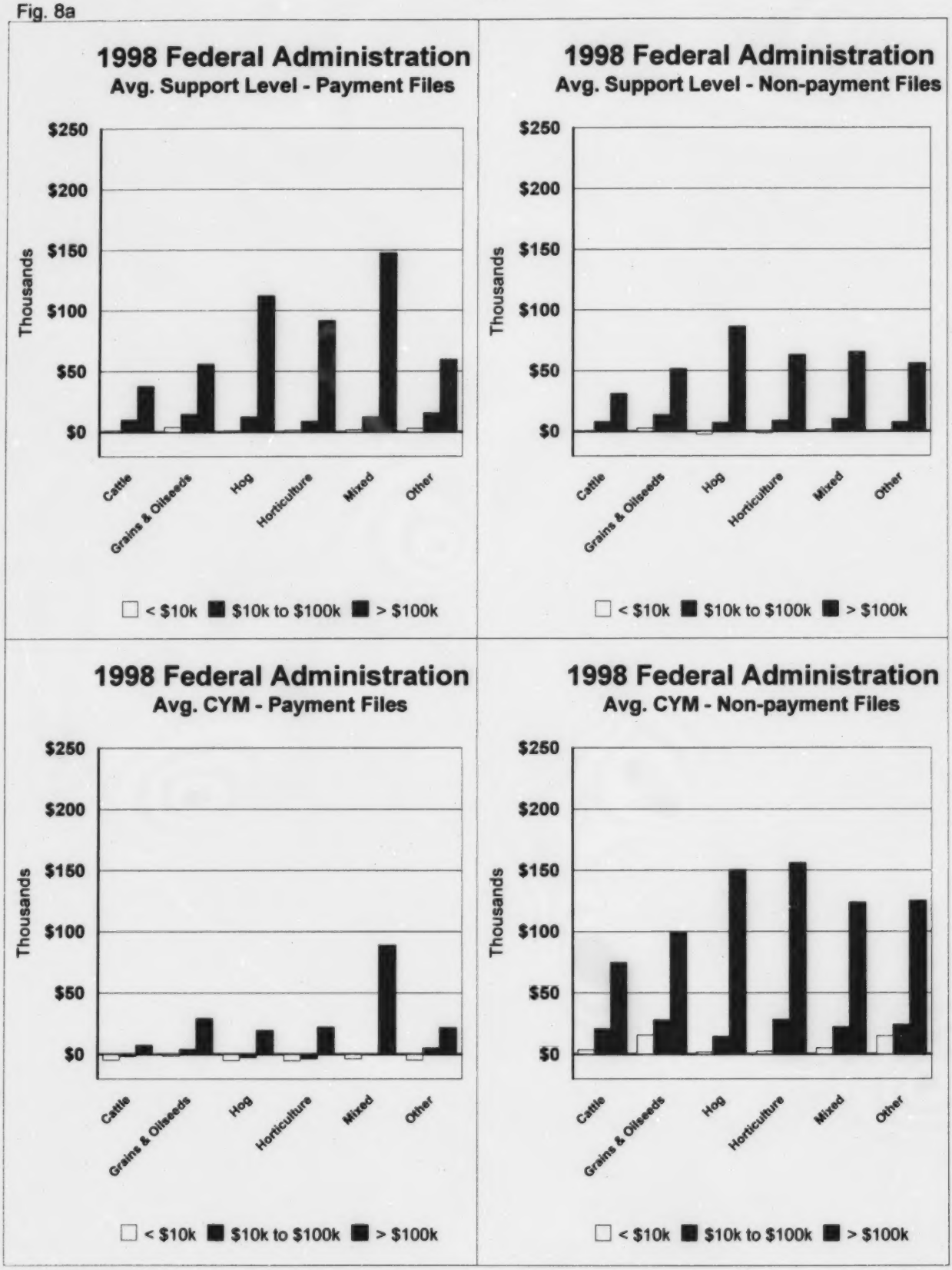
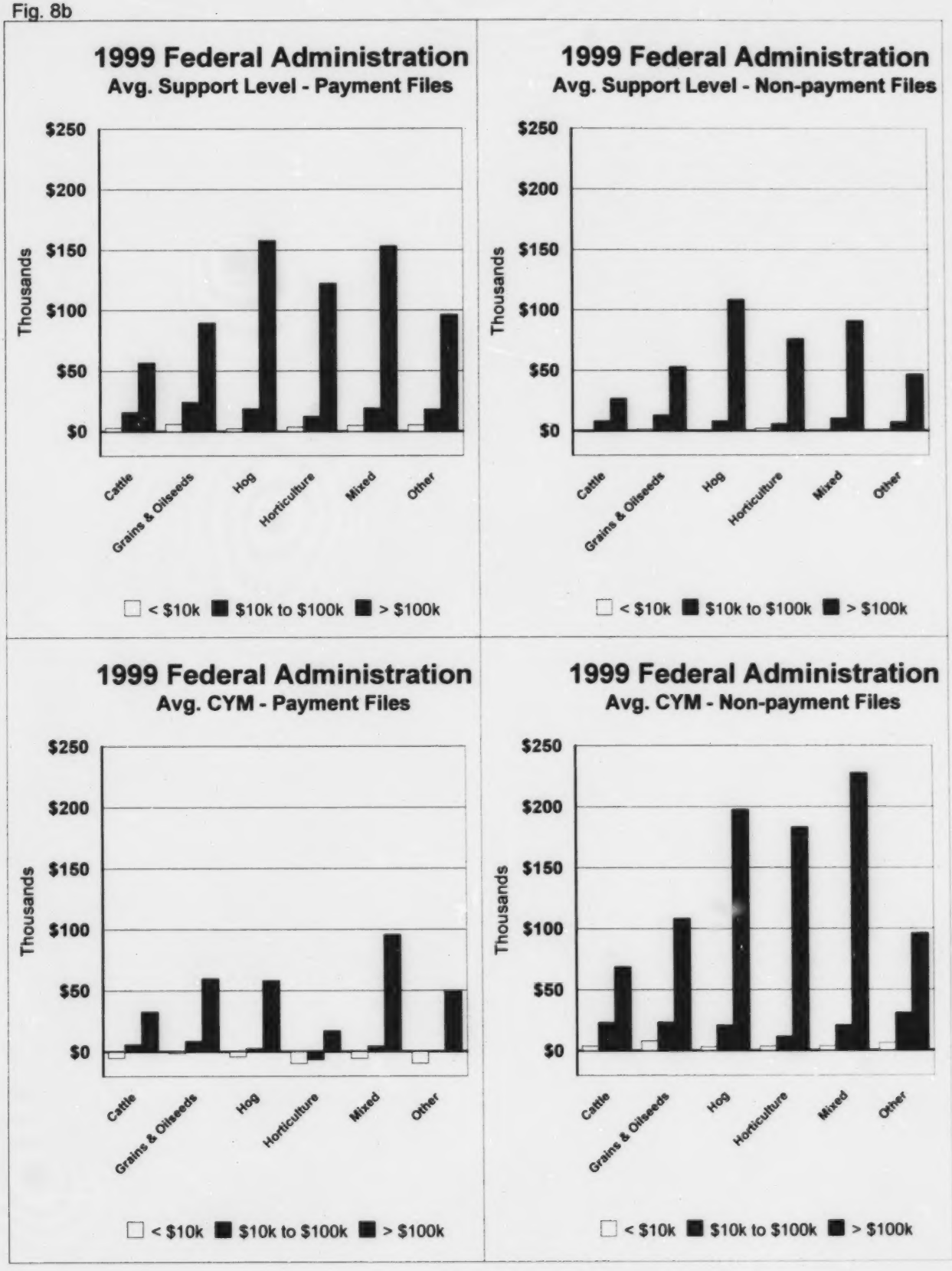

1998 Federal Administration
Avg. Support Level - Payment Files
Thousands
$250
$200
$150
$100
$50
$0
Cattle
Grains & Oilseeds
Hog
Horticulture
Mixed
Other
< $10k
$10k to $100k
> $100k
1998 Federal Administration
Avg. Support Level - Non-payment Files
Thousands
$250
$200
$150
$100
$50
$0
Cattle
Grains & Oilseeds
Hog
Horticulture
Mixed
Other
< $10k
$10k to $100k
> $100k
1998 Federal Administration
Avg. CYM - Payment Files
Thousands
$250
$200
$150
$100
$50
$0
Cattle
Grains & Oilseeds
Hog
Horticulture
Mixed
Other
< $10k
$10k to $100k
> $100k
1998 Federal Administration
Avg. CYM - Non-payment Files
Thousands
$250
$200
$150
$100
$50
$0
Cattle
Grains & Oilseeds
Hog
Horticulture
Mixed
Other
< $10k
$10k to $100k
> $100k

Fig. 8b


1999 Federal Administration
Avg. Support Level - Payment Files
$250
$200
$150
$100
$50
$0
Thousands
Cattle
Grains & Oilseeds
Hog
Horticulture
Mixed
Other
< $10k
$10k to $100k
> $100k
1999 Federal Administration
Avg. Support Level - Non-payment Files
$250
$200
$150
$100
$50
$0
Thousands
Cattle
Grains & Oilseeds
Hog
Horticulture
Mixed
Other
< $10k
$10k to $100k
> $100k
1999 Federal Administration
Avg. CYM - Payment Files
$250
$200
$150
$100
$50
$0
Thousands
Cattle
Grains & Oilseeds
Hog
Horticulture
Mixed
Other
< $10k
$10k to $100k
> $100k
1999 Federal Administration
Avg. CYM - Non-payment Files
$250
$200
$150
$100
$50
$0
Thousands
Cattle
Grains & Oilseeds
Hog
Horticulture
Mixed
Other
< $10k
$10k to $100k
> $100k

A5. An Evaluation of Crop Insurance Programming in Canada

5.1 Purpose of the Program

The Crop Insurance Program helps stabilize a farmer's income by reducing the economic effects of crop losses caused by natural hazards, and serves as a risk management tool against weather related crop disasters.

5.2 Program Description

Crop Insurance is a provincially delivered program to which the provincial and federal governments contribute. Producers benefit by sharing premium costs with the provincial and federal governments. Premium rates must be set in an actuarially sound manner and provincial schemes must be self-sustaining. Producers receive a yield per acre production guarantee, based on a percentage of their probable yield. The method used to establish probable crop yields must be reflective of actual yields produced and is based on the individual's previous production history. If production falls below the yield guarantee, the producer is eligible for an indemnity.

5.3 Evaluation of Program against Guiding Principles of the Framework Agreement

Program Principles	Program Assessment
Production and Market Neutrality – Programs should not influence farmers' production and marketing decisions and should not distort regional comparative advantage.	*Program is based on long-term average yields and current market prices and does not distort producers' production or marketing decisions*
Trade Neutrality – Programs should minimize countervail risk.	*While the program is not considered "Green", there is minimal risk of countervail. The US has similar programs and has not raised Canada's crop insurance program to date.*
Environmental Sustainability – Program should not be adverse to environmental stewardship.	*Economically, it may support cropping in less environmental sustainable areas but the impact is minimal.*
Adaptation and Adjustment – Programs should not be adverse to market-oriented adjustments.	*This program does not interfere with any market-oriented risk management program.*
Minimal Overlap and Duplication – Programs should not duplicate purpose and payments.	*Some overlap with CFIP but provides support in areas not covered by CFIP (negative margin, coverage greater than 70 per cent of the reference period).*
Minimal Moral Hazard – Programs should minimize moral hazard.	*Minimal moral hazard with adequate administration and auditing.*

Funding Principles	
Non-Distorting Distribution of Government Funds – Allocation of funding should not be distorting to regional/commodity comparative advantage.	*Tends to be more important for western regions where there tends to be increased weather related variability.*
Cost-Sharing – Producers and both orders of government should share program costs, including premiums, deficits and administration.	*Federal/Provincial/Producer cost-sharing at various levels depending upon the province.*
Capping – There shall be limits on the level of assistance provided to individual producers.	*Per acre support capped but no limits of eligible acres that can be insured by any producer.*
Equity – The financial resources of the Government of Canada should be allocated to provide, over time, the same level of protection for farmers in similar circumstances.	*The federal government participates to varying degrees in the programs in all provinces. Higher levels of coverage are provided and cost-shared by the federal government in some provinces because of less production variability in those provinces.*

5.4 Overall Importance of the Program to Producers

- The program covers 65 per cent of Canada's land in crops.
- 103,000 Canadian producers carry some form of crop insurance.
- The program provided $6.7 billion of coverage in 2001.
- It is extremely important to crop producers with little financial capacity to withstand a crop failure.
- Not as effective for horticulture crops or livestock pasture and forages.
- Generally not applicable for livestock, however weather does not pose the same risks to livestock as to crops.

5.5 Concerns Raised about the Program by Producers

- Maximum coverage levels are too low and should be increased.
- A revenue insurance or cost of production component should be added to provide market protection.
- The ten-year yield average is a bias against the adoption of new technology. Coverage levels should reflect new technology and/or improved management techniques.
- The reduction in coverage levels after successive claims due to drought exacerbates the gap between insurance indemnity and production costs.
- Pasture, hay and greenfeed insurance tend to be inadequate.
- Concerns about the level of coverage when commodity prices are low.

5.6 Empirical Analysis

- Two environmental assessments of the crop insurance program have indicated the program is neutral in terms of its impact on the environment.
- An evaluation based on a nine year study period showed the average net incomes of farmers purchasing insurance was nine to 15 per cent more stable than that of non-insured farmers.
- A previous evaluation of the crop insurance program found that insured farmers tended to have higher debt levels and higher net worth than non-insured farmers do.
- The cost of administration for Canadian Crop Insurance is below that required for the U.S. program. For the five-year period between 1996 and 2000, Canadian administration costs as a percentage of total premiums were about one-third less than those in the U.S. For the same period, Canadian administration costs per acre were about 25 per cent below U.S. costs, while Canadian administration costs per contract were 18 per cent lower than those in the U.S were.

A6. Farm Safety Nets in Quebec

6.1 Background

Quebec has just conducted a review of its safety net programs. At the Quebec Agriculture and Agri-Food Conference held in March 1998, the partners concerned agreed to study the possibility of the government ensuring pre-determined funding of financial programs (crop insurance, stabilization insurance and farm financing) for a period of 7 years. This undertaking was accompanied by the following conditions:

1. Propose a whole-farm safety net system compatible with the rules of international trade and equitable for all farms.

2. Propose a structure or organization that would integrate the management of financial programs in order to optimize their use by farmers.

Following the March 1998 conference, a task force was established to implement the consensus on the theme of farm risk management.

This task force, made up of producer and government representatives, tabled a report in March 1999 proposing the establishment of a new farm safety net plan consisting of a universal program, the Farm Income Stabilization Account (CSRA) along with companion programs, which would be made available to farmers based on criteria related to the economic efficiency of the agricultural sector. The report, resulting from a consensus between the various stakeholders, also proposed the establishment of a new organizational structure to manage the financial instruments for agriculture.

In December 2000, the government gave assent to the Act respecting La Financière agricole du Québec, *establishing the corporation of the same name. The main mission of this government corporation is to support and promote the sustainable development of Quebec's agriculture and agri-food sector. It has the mandate of modernizing financial tools designed for farmers and providing them with safety net, insurance and financial services adapted to risk management in these areas of activity.*

Discussions between agricultural stakeholders led to the establishment of La Financière agricole du Québec. *The proposal to create the corporation emerged from debates and consultations with the agricultural clientele, aimed at reaching a broad consensus on the function of the organization and the programs it has to implement.*

La Financière agricole du Québec must carry out its mission and mandates in partnership with the agricultural sector. To that end, 5 of the 11 members of the board of directors are from the farming community.

This new corporation also operates within the government's new management parameters, including accountability, private-public partnership and results-oriented management. Within this framework, it is provided that the corporation will establish a business plan every year and that it will submit the results of its actions to the Minister in the form of an annual report.

Given the implementation of Quebec's new farm safety net plan, emphasis must be put on its new assistance model for the purposes of the evaluation planned as part of Canada's safety net review.

6.2 The New Safety Net Plan

Objectives

The objectives of *La Financière agricole du Québec* in program development are to:

- permit risk management adapted to the situation of farms;
- establish a basic plan offering universal and equitable coverage to all farms;
- establish companion programs to protect farms from major income fluctuations;
- increase the productivity of the sector's farms;
- provide assistance compatible with the rules of international trade.

Development

The first mandate of *La Financière agricole* is to develop a farm safety net plan whose main components are as follows:

- a universal basic program:
  - including an individual farm risk management account;
  - based on whole farm income;
  - including terms and conditions of eligibility, limits, and conditions of withdrawal.

- companion programs for all commodities if it is shown that:
  - the historical risk characterizing a commodity is measurable and that it requires higher coverage than that provided by the universal basic program;
  - orderly and effective marketing exists for this commodity;
  - the commodity is organized in such a way as to obtain an optimum market price.

Producers will continue to have access to a disaster assistance program under intergovernmental agreements.

Implementation

Initially, it was decided that there would be a harmonious phasing-in of the basic CSRA program. Starting in fiscal 2000, farms whose commodities do not benefit from any safety net program may be covered by CSRA. For ASRA-insured commodities, there will be no change in 2001. Producers of these commodities may take advantage of CSRA, however, in the 2002 stabilization year.

6.3 Overall Evaluation of the New Plan

An agreement between the Quebec Minister of Agriculture, Fisheries and Food and *La Financière agricole du Québec* sets out the obligations of the parties with regard to funding and agreement renewal procedures. It provides that in the second last year of application of the agreement, *La Financière agricole du Québec* will evaluate the effects of its actions. This evaluation will take account of elements relating to its mission, its objectives, changes to rules of international trade, changes in its financial position, the context of federal transfers, support provided by competing countries, and an evaluation of the farm financial situation.

Description of Basic Program

The **CSRA,** which is patterned on the Net Income Stabilization Account (NISA), includes the following features:

- The CSRA is an individual risk management account, consisting of a single fund for each farm and is managed directly by *La Financière agricole du Québec.*
- The CSRA is a program for the farm, which is defined in accordance with the standards set out in the *Regulation respecting the registration of agricultural operations and the reimbursement of real estate taxes and compensations.*
- The CSRA is a whole farm system and is not related to the type or volume of production.
- The program operates according to the concept of **eligible net sales (ENS),** i.e. the sales of eligible commodities less the purchases of eligible commodities.
- The CSRA covers all commodities but does not authorize contributions *by La Financière agricole du Québec* for products under a quota system.
- Since the government's financial contribution is conditional on the farm contribution, the government provides a matching contribution for each percentage point of eligible net sales by farms.
- The government's contribution may reach a maximum of 6% of eligible net sales, up to the maximum annual amount of $500,000 of ENS by qualified member.
- A limit is established for the account's accumulated balance.
- There is no interest bonus.
- Producers will be able to deduct their contributions from taxable income on their Quebec tax returns. At the same time, though, any amounts withdrawn must be added to their taxable income. Discussions are currently under way with the federal government for the application of this principal at the federal level.
- A withdrawal from the account is possible when the margin (revenues less expenditures) for the year is less than the average of the previous three years or when it is less than a minimum net farm income threshold.

Comments based on the program and funding principles of the Farm Risk Management Framework Agreement

Since the CSRA and NISA programs are similar in nature, the comments based on analysis criteria developed during negotiations of federal-provincial safety net agreements reflect this similarity.

Program principles (taken from Framework Agreement))	**Comments**
Production and market neutrality - The programs should not impact on producers' production and marketing decisions and they should not distort the comparative advantage of regions.	The CSRA will cover all commodities except those under supply management. The CSRA therefore does not impact on producers' production and marketing decisions.
Trade neutrality – The programs should reduce the risk of countervailing duties as much as possible.	The CSRA has the same level of acceptance as NISA in terms of the rules of international trade since the basic parameters of both these program are equivalent.
Environmental protection – The programs should not interfere with sound environmental management.	CSRA's impact on the environment is related to the impact it may have on commodities. Since the CSRA is a whole-farm income program, it is unlikely to impact on producers' decisions, giving them incentive to produce one commodity to the detriment of another. The program can therefore be considered to have a neutral environmental impact. Quebec also plans to introduce eco-conditionality in its assistance programs by the year 2003, starting with hog production.
Adaptation and adjustment – The programs should not interfere with adjustments related to market signals.	This type of program does not interfere with normal market signals, especially since it covers all sectors in the same way.
Minimal overlap and duplication – The programs should not involve duplication in terms of objectives or payments.	ASRA coverage will be reduced to allow for potential government contributions to the CSRA. In this way, there will be no overlap between these two programs.
Minimal risk of abuse – The programs should reduce abuse as much as possible.	The risks of abuse, given the program's nature, will be minimal. Theoretically, they will be the same as those for NISA.

Funding principles	
Allocation of public funds non-distorting – The allocation of funds should distort the comparative advantage of a sector or region.	The CSRA will provide a government contribution of 6% of ENS to producers, i.e. double the basic contributions under NISA.. In several other provinces, though, the NISA amount is enhanced.
Cost sharing – Farmers and both levels of government should share program costs, including premiums, deficits and administrative expenses.	The CSRA will be financed by *La Financière agricole du Québec* at 6% of ENS. *La Financière* receives contributions from the Government of Quebec and the Government of Canada. Producers will match the contributions of *La Financière*. The CSRA cannot have deficits. Administrative expenses are to be shared between *La Financière* and producers.
Ceiling – The level of funding provided to each producer should be capped.	Government contributions to the CSRA are to be capped.
Equity – The financial resources of the federal government should be allocated in such a way as to provide, over the years, the same level of protection to farmers whose situation is similar.	Under the current federal allocation formula, based on the economic importance of agriculture in each province, federal funds are equitably allocated and the provinces are allowed some flexibility in implementing programs appropriate to their specific agriculture conditions.

A7. Benchmark Farms

The **benchmark farm model** is a generalized, whole-farm model that combines data from a variety of standard sources to produce a benchmark that is useful for farm-level analytical purposes. Each benchmark farm is designed to be an example of a farm within a specific size class and geographic area producing a specified set of commodities (e.g., an Ontario grain and oilseed producer with total revenues of between $100,000 and $250,000). The benchmark farms are not intended to be statistically representative of all the farms within their cohort, though the benchmarks are based on averages of data reported by farmers.

Statistics Canada's Extraction System of Agricultural Statistics (ESAS) provides the historical period base data for all the benchmark farms. Revenues and expenses are obtained directly from farmers' tax returns and are available in the Taxfiler database. Crop acreages and livestock numbers come from Statistics Canada's June Crop Survey (JCS) and July Livestock Survey (JLS) respectively. Other data is obtained from the Farm Financial Survey and Statistics Canada's crop yield estimates. Agricultural and Agri-Food Canada's Farm Income Forecast is combined with the historical data from ESAS, providing information that is needed in constructing projections and forecasts for each benchmark farm. Program payments are calculated on the basis of the revenues and expenses of the farm. This is an important consideration when examining the pattern of program payments, for example when some farmers may not qualify for program payments, and when the interaction between programs is of interest. Therefore, the benchmark farms are helpful in assessing the impact of changes to government programs.

Program Payments

Major government programs, including Crop Insurance, NISA, CFIP and selected companion programs, are calculated individually for the benchmark farm. Therefore, the program payments reflect what a farmer with similar revenues, expenses and production can actual expect to receive rather than an average of what all producers received. *The farms are assumed to participate in all government programs available to them. In the case of NISA, the farm is assumed to have been a participant since the start of the program or since the date that the commodity group became eligible to participate.* The NISA calculations estimate potential withdrawals for participating farms. Because of the difficulty of estimating a farmer's withdrawal pattern, the farmer is assumed to take all potential withdrawals that are triggered. For the Crop Insurance Program, a relatively fixed level for payments are estimated for the crop farms to represent expected spot losses due to localized events like hailstorms or wildlife damage. Area-wide indemnities are estimated separately. Payments from minor programs are also calculated strict for the benchmark, but are estimated as a lump sum payment for the group.

Benchmark Farm Results

Prince Edward Island Potato Farm

The Prince Edward Island potato farm would have suffered a loss in 2001 because of lower potato revenues had it not been for the combined effect of government program payments. First, the farm received $43,200 as its share of the $22.6 million Potato Disposal Program, and another $7,100 from two smaller programs, the Potato Seed Strategy Initiative and the 2001 Potato Diversion Program. In addition to this, the potato farm was able to withdraw another $48,200 from its NISA account to cover the low margins in 2000. However, this NISA withdrawal essentially used up the surpluses in the farm's NISA accounts and the closing balance was only $2,200. The low margin in 2001 triggered a further NISA withdrawal of $18,000 (not taken until 2002), which was constraint to the remaining NISA surplus and current stabilization year contributions. Therefore, NISA withdrawals in 2001 and 2002 (taken in 2003) are limited to the current year contributions.

The financial situation in 2002 triggers a $14,500 NISA withdrawal, well below the level that would have been triggered. NISA withdrawals decline for each of the yield reduction scenarios of 20%, 40% and 60%, respectively because the farmer can only make contributions on a decreasing level of eligible net sales. This is important to note because the NISA withdrawals actually decrease with yield if account balances are not in surplus.

However, the other program payments mitigate some of the financial hardship faced in 2002. The farm was eligible for a disaster program payment of $3,400 in 2002 as a result of the financial situation in 2001. The disaster program payment increases to $29,100 for the 2002 baseline, though this would not be received until 2003. This amount further increases to $35,400 if yields decline by 20% or more. The amount of funds generated through the disaster program remains relatively constant at this level as Crop Insurance payments compensate the farmer for higher yield losses, assuming a 70% crop insurance coverage level.

Quebec Hog Farm

Throughout the 1995-2002 period, the Quebec benchmark hog farm is expanding production of pigs, reflecting what is occurring in the industry in Quebec. The benchmark hog farm is highly specialized in hog production, receiving approximately 95% of its market revenues from the sale of pigs. Because of this high degree of specialization, it's assumed that the Quebec hog farm does not participate in NISA or Crop Insurance and all direct government program payments come from Quebec's ASRA program. Lower hog prices in 1998 and 1999, an only moderately improved prices in 2000 generate ASRA payments of $98,600, $80,700 and $102,900 in the years 1999-2001, respectively. Improved hog prices in 2001 drop the ASRA payment back done to $74,400 in the 2002 baseline. As pig prices decrease by 20%, 40% and 60% respectively in the scenarios for 2002, the ASRA program compensates the farmer for declines in market revenues.

Ontario Hog Farm

Unlike the Quebec hog farm, the Ontario participates in NISA and crop insurance, receiving nearly 10% of its revenues from crop production. The benchmark farm does not make any NISA withdrawals or receive any disaster program payments during the 2000-2002 baseline period. However, declines in pig prices generate both NISA withdrawals and disaster program payments. A 20% drop in pig prices triggers a NISA withdrawal of $58,000, eliminating the surplus in Fund 2 and reducing the surplus in Fund 1. In addition, a disaster payment of $30,100 is triggered. Together, these payments raise net operating income to $23,000, far below the $123,900 of baseline 2002. A 40% pig price drop triggers a NISA withdrawal of $119,100 and eliminates any account balance surplus. In spite of a $103,900 disaster payment, the farm suffers a loss of $75,400. A 60% percent loss triggers a NISA withdrawal of $112,700 that has been reduced because of lower contributions resulting from lower eligible net sales. Disaster payments are limited to $106,900 because the revenue conditions generate a negative margin not covered by the program.

Ontario Grain and Oilseed Farm

The Ontario grain and oilseed benchmark has maintained relatively stable income during the 1995-2001 period, supported when needed by relatively small NISA withdrawals, and starting in 1995 with Market Revenue Insurance payments. Initial MRI payments were relatively small. It wasn't until 1998 that a significant payment of $8,600 occurred, which was paid in 1999. In 2001, the farmer received MRI payments of $15,600 as a result of coverage for 2000. In addition, the farmer also received a combined $13,800 through the Canada-Ontario Grain and Oilseed Payment and the Ontario Grain Stabilization Program.

In the 2002 baseline, low income triggers a $14,800 NISA withdrawal to be taken in 2003. There is also an additional $6,500 available from MRI. Being a straight price support program based on long-term average yields, MRI payments remain the same regardless of the yield decline scenario. *Even in the case of large yield reductions in 2002, the Ontario grain and oilseed farm still carries a NISA surplus of between $35,000 and $40,000 into the 2003 stabilization year.*

Manitoba Large Grain and Oilseed Farm

The first thing to note about the large Manitoba grain and oilseed farm is that it has been able to build up a large surplus in both of its NISA funds. The only significant withdrawal was $28,000 in 2000 for the income shortfall in 1999, which still left $146,500 in the NISA accounts going into the 2002 stabilization year. In addition, the farm receives an estimated $9,400 in 2000 for CMAP and another $6,600 in 2001 for CMAP2.

In the 2002 baseline, the farm triggers only a small $1,000 NISA withdrawal. However, a 20% yield loss for major crops triggers a $55,800 NISA withdrawal that is taken in 2003. The yield loss also triggers a $15,900 CFIP payment. As with all the crop farms, the large Manitoba grain and oilseed farm receives some level of crop insurance that cover spot losses, averaging about $4,500 in this case. Because the farm participates in the crop insurance program at the 80% coverage level, crop insurance indemnities for wider-area yield losses don't occur until the farm suffers 40% and 60% yield losses. As expected, NISA withdrawals, CFIP payments and crop insurance indemnities all increase as the yields decline, *though crop insurance indemnities largely cover the production shortfalls at higher yield losses.* In all cases, program payments bring the farm's income back to acceptable levels, though the payments are not received until the following year 2003, assuming no interim withdrawals in the current calendar year. *As with the other grain and oilseed farms, the Manitoba farm carries a significant NISA surplus into the 2003 stabilization year.*

Manitoba Medium-Sized Grain and Oilseed Farm

The medium-sized Manitoba grain and oilseed farm is characterized by frequent small NISA withdrawals that never amount to more that $4,700. As a result, fund balances build up to $27,100 at the start of the 2002 stabilization year. In the baseline 2002, the farm triggers only a $3,000 NISA withdrawal. In terms of companion program payments, the farm receives an estimated $4,800 in 2000 for CMAP and another $3,400 in 2001 for CMAP2. On a cash basis, the farm receives $1,500 for crop insurance spot losses and about $300 for a collection of smaller miscellaneous programs.

A 20% yield loss in major crops in 2002 triggers a $13,700 NISA withdrawal and a $5,800 CFIP payment. This eliminates the surplus in Fund 2, but most of Fund 1 remains intact. However, a 40% yield loss results in both lower NISA and CFIP payments. This happens because Crop Insurance indemnities reduce the need for the stabilization payments at this level of yield loss. The same is true for the 60% yield loss.

Saskatchewan Grain and Oilseed Farm

NISA payments of $7,200 and $14,300 are triggered on the Saskatchewan grain and oilseed farm baseline for 2001 and 2002 stabilization years respectively in response to reduced grain and oilseed margins. The farm ends the 2002 stabilization year with a combine Fund 1 and Fund 2 NISA surplus of $90,800. In the 2001 and 2002 calendar years, the farm receives CSAP payments of $9,400 and $6,600 in support of grain and oilseed production. Throughout the period, the farm also receives Crop Insurance spot loss indemnities of between $1,500 and $2,000.

When faced with a 20% yield reduction for major crops, NISA withdrawals for 2002 jump to $34,900 and a CFIP payment of $14,800 is triggered. Because the farm is assumed to have 80% crop insurance coverage, payments are not triggered until the 40% yield loss. In this second scenario, NISA withdrawals fall about $4,000 to $30,800 and CFIP payments fall about $4,000 to $10,600 as Crop Insurance indemnities equalling $27,300 make up for the production loss. With a 60% yield loss, each of NISA and CFIP again fall by about $4,000 as Crop Insurance indemnities total $52,000. Regardless of yield loss, a Saskatchewan grain and oilseed farm that has been participating in NISA since its inception maintains a healthy NISA surplus of $77,600 into the 2003 stabilization year.

Alberta Cow-Calf Farm

Though the Alberta cow-calf farm is highly specialized in cattle production, it still receives about 10% (approximately $20,000) of its market receipts from grain and oilseed production. This production generates approximately $900 in spot loss crop insurance payments, which are assumed to be unaffected by the cattle price loss scenarios. Furthermore, because the grain and oilseed receipts are not very large, the farm does not participate in NISA until cattle became eligible in the 2000 stabilization year.

The Alberta farm received $19,300 and $25,200 in provincial program payments in 2000 and 2001 respectively under the Alberta Farm Income Assistance program. In 2002, the farm receives a very low level of program payments ($900 in crop insurance plus $900 of miscellaneous payments) as strong cattle sales maintain income levels. At the end of the stabilization year, the NISA surplus is $33,500 after three years of participation in the program. A 20% cattle price reduction in 2002 generates $28,400 in NISA withdrawals, which eliminate most of the NISA surplus, and a $15,400 disaster program payment. As a result of being limited by available account balances, NISA withdrawals are limited to between $28,000 and $25,000 through the scenarios. However, higher disaster program payments make up the shortfall in income for the 40% price drop scenario, rising to $49,600. Even disaster payments, though, are limited to $50,900 in the 60% price loss as the farm falls into negative margins.

Prince Edward Island
Scenarios
Total Province
Potato
$250,000 - $499,999
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Summary	1995	1996	1997	1998	1999	Forecast 2000	Forecast 2001	Forecast Baseline 2002	20% Yield Reduction 2002	40% Yield Reduction 2002	60% Yield Reduction 2002
Total Revenue from Market Receipts	310,102	270,046	229,732	359,775	381,283	293,855	286,536	284,833	223,277	181,721	140,166
Total Payments from Programs	19,480	5,852	31,677	31,282	8,738	16,540	119,306	41,810	41,810	72,036	132,666
Total Operating Revenues	329,581	275,898	260,410	391,057	390,021	310,396	378,842	306,442	264,886	253,756	273,082
Total Operating Expenses	252,299	247,901	234,062	321,634	297,936	313,316	317,364	318,722	317,475	317,141	317,720
Net Operating Income	77,282	27,997	36,368	69,434	62,085	-2,921	58,488	-12,279	-52,589	-63,385	-44,657
Payments Generated											
NISA (Paid 2003)	0	27,249	25,673	0	0	48,211	18,031	14,621	11,882	11,175	12,491
CFIP/Disaster (Paid 2003)	0	0	0	0	0	8,480	3,373	29,118	35,360	38,993	38,118
Crop Insurance	3,580	6,816	2,467	8,478	9,470	10,562	11,837	11,070	11,070	41,486	102,349
NISA Closing Balances (Stabilization Year)											
Fund 1	10,899	12,825	0	7,445	14,880	2,122	0	0	0	0	0
Fund 2	12,445	0	0	5,336	17,537	0	0	0	0	0	0
Estimated number of farms	110	95	85	100	85	100	100	100			

Income Statement	1995	1996	1997	1998	1999	2000	2001	Baseline 2002	20% Yield Reduction 2002	40% Yield Reduction 2002	60% Yield Reduction 2002
Operating revenues											
All wheat	1,069	2,683	2,832	2,068	2,194	2,290	2,387	2,491	2,491	2,491	2,491
Barley	12,515	10,869	9,507	11,527	10,241	10,222	11,746	11,553	11,553	11,553	11,553
Canola	0	0	0	0	0	0	0	0	0	0	0
Soybeans	0	0	0	0	0	0	0	0	0	0	0
Corn (grain and seed)	0	0	0	0	0	0	0	0	0	0	0
Field peas	0	0	0	0	0	0	0	0	0	0	0
Beans (white and coloured)	0	0	0	0	0	0	0	0	0	0	0
Lentils	0	0	0	0	0	0	0	0	0	0	0
Other grains and oilseeds	1,538	676	764	685	1,382	1,324	982	1,142	1,142	1,142	1,142
Total grains and oilseeds	15,122	14,208	13,103	14,279	13,816	13,936	15,095	15,096	15,096	15,096	15,096
Potatoes	283,977	230,154	180,584	303,419	290,466	241,365	200,904	207,791	196,225	124,988	83,112
Other crops	1,870	1,430	5,231	7,133	5,199	3,725	4,292	4,484	4,484	4,484	4,484
Total other crops	285,847	231,585	185,815	310,552	304,635	245,090	205,247	212,235	170,679	129,123	87,597
Total crop revenues	290,969	245,792	199,018	324,822	318,451	259,026	220,332	227,331	185,775	144,219	102,692
Total livestock and products revenues	19,706	19,038	21,767	23,912	19,313	21,106	23,214	24,048	24,048	24,048	24,048
Private crop and livestock insurance proceeds	1,960	182	1,197	1,182	1,629	1,224	1,677	1,262	1,262	1,262	1,262
Crop insurance payments	1,847	2,443	1,824	1,895	3,537	10,962	11,837	11,070	11,070	41,486	102,349
Disaster payments (incl. AIDA/CFIP)	0	0	0	0	0	0	8,480	3,373	3,373	3,373	3,373
Other program payments	17,633	3,409	2,804	4,024	5,201	5,578	80,806	9,136	9,136	9,136	9,136
Total insurance and program payments	21,440	6,004	5,825	6,901	10,366	17,764	72,172	24,840	24,840	55,256	116,119
Other revenues	7,466	5,064	6,750	10,109	11,891	12,800	11,914	12,193	12,193	12,193	12,193
Total operating revenues	329,581	275,898	233,161	365,394	360,021	310,396	327,631	288,412	246,865	235,725	256,022
Operating expenses											
Fertilizer and lime	44,704	45,177	40,234	61,890	56,064	54,972	61,018	57,968	57,968	57,968	57,968
Pesticides	21,318	30,140	24,880	31,410	33,290	35,310	32,256	34,377	34,377	34,377	34,377
Seed and plants	22,702	17,483	13,719	23,896	26,181	28,276	28,560	28,560	28,560	28,560	28,560
Containers, twine and baling wire	5,117	5,292	5,114	7,971	5,789	6,253	6,505	6,636	6,636	6,636	6,636
Other crop expenses	0	0	0	0	0	0	0	0	0	0	0
Total crop expenses	93,841	99,091	83,947	124,966	121,345	124,811	128,339	127,540	127,540	127,540	127,540
Total livestock expenses	3,786	4,894	3,979	5,752	5,390	4,837	5,243	5,727	5,727	5,727	5,727
Small tools	292	307	184	379	381	397	405	421	421	421	421
Net fuel expenses (machinery, truck and auto)	13,222	13,081	11,510	16,775	14,883	19,155	18,198	17,833	17,833	17,833	17,833
Repairs, licenses and insurance	23,025	19,948	18,227	26,887	24,624	25,624	26,138	27,193	27,193	27,193	27,193
Total machinery expenses	36,539	33,316	29,920	43,732	39,903	45,176	44,739	45,446	45,446	45,446	45,446
Salaries (including CPP, QPP, EI)	43,718	38,408	41,347	50,573	45,034	46,836	47,837	48,251	48,251	48,251	48,251
Rent	13,228	11,889	11,906	16,986	14,881	15,000	14,699	14,699	14,699	14,699	14,699
Insurance	5,284	4,392	5,061	7,368	5,415	5,540	5,699	5,826	5,826	5,826	5,826
Total utilities (farm share)	4,102	3,184	3,797	4,084	4,143	4,322	4,344	4,388	4,388	4,388	4,388
Custom work and machine rental	11,984	10,639	10,067	14,457	14,084	14,517	14,066	14,336	14,336	14,336	14,336
Net interest expenses	20,281	19,398	17,520	27,873	24,177	28,211	28,437	28,485	28,485	28,485	28,485
Net property taxes	2,616	2,362	1,961	2,730	2,483	2,476	2,488	2,500	2,500	2,500	2,500
Other expenses	11,950	13,088	8,897	15,632	13,620	14,062	14,273	14,639	14,639	14,639	14,639
Total operating expenses	247,299	240,810	218,633	314,134	290,436	306,816	309,864	311,835	311,835	311,835	311,835
Net operating income	82,282	35,287	15,127	51,260	69,585	4,579	17,777	-23,424	-64,980	-76,110	-55,814
NISA deposits	5,000	7,291	6,019	7,800	7,500	7,800	7,500	6,888	5,639	5,306	5,984
NISA withdrawals	0	0	27,249	25,673	0	0	48,211	18,031	18,031	18,031	18,031
Net operating income (after stabilization programs)	77,282	27,996	36,358	69,433	62,085	-2,921	58,488	-12,279	-52,589	-63,385	-44,657
Capital cost allowance	35,393	28,259	23,034	34,007	34,782	38,582	38,041	38,884	38,884	38,884	38,884
Net farm income	41,888	-263	13,324	35,426	27,302	-41,473	20,448	-51,163	-91,472	-102,268	-83,551
Operating margin (before stabilization programs)	0.25	0.13	0.07	0.14	0.19	0.02	0.08	-0.08	-0.26	-0.32	-0.22

Quebec
Scenarios
Total Province
Hog
$250,000 - $499,999
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Summary	1995	1996	1997	1998	1999	Forecast 2000	Forecast 2001	Forecast Baseline 2002	20% Price Decrease 2002	40% Price Decrease 2002	60% Price Decrease 2002
Total Revenue from Market Receipts	378,999	372,485	426,940	405,196	404,994	534,451	590,771	574,615	468,761	362,907	257,053
Total Payments from Programs	61,972	37,601	9,681	53,140	98,622	80,723	102,854	74,379	144,184	213,949	283,735
Total Operating Revenues	440,972	410,086	436,621	458,336	503,616	615,174	693,625	648,994	612,925	576,856	540,787
Total Operating Expenses	390,468	361,467	384,116	425,572	453,225	481,574	498,622	523,000	523,000	523,000	523,000
Net Operating Income	50,504	48,619	52,505	32,763	50,391	153,600	195,003	125,994	89,925	53,856	17,788
Payments Generated											
NISA (Paid 2003)	0	0	0	0	0	0	0	0	0	0	0
CFIP/Disaster (Paid 2003)	0	0	0	0	0	0	0	0	0	0	0
Crop Insurance	0	0	0	0	0	0	0	0	0	0	0
NISA Closing Balances (Stabilization Year)											
Fund 1	0	0	0	0	0	0	0	0	0	0	0
Fund 2	0	0	0	0	0	0	0	0	0	0	0
Estimated number of farms	575	605	615	620	630	640	640	650			

Income Statement	1995	1996	1997	1998	1999	2000	2001	Baseline 2002	20% Price Decrease 2002	40% Price Decrease 2002	60% Price Decrease 2002
Operating revenues											
Total grains and oilseeds	4,178	4,629	2,439	13,261	8,570	8,209	7,499	9,720	9,720	9,720	9,720
Total other crops	948	737	801	2,236	1,551	1,518	1,464	1,569	1,569	1,569	1,569
Total crop revenues	5,126	5,366	2,940	15,496	10,121	9,727	8,963	11,288	11,288	11,288	11,288
Cattle	2,715	3,348	6,754	5,071	3,858	3,831	4,213	4,287	4,287	4,287	4,287
Swine	348,178	337,357	398,575	348,711	381,485	491,875	548,584	529,270	423,416	317,562	211,708
Dairy products and subsidies	9,203	12,006	11,420	11,775	8,381	8,733	8,822	9,079	9,079	9,079	9,079
Other livestock and products	1,962	1,999	1,811	1,567	2,796	2,889	3,113	3,317	3,317	3,317	3,317
Total livestock and product revenues	369,048	364,619	417,560	367,124	376,279	507,330	564,780	545,953	440,099	334,245	228,391
Total program payments	61,972	37,601	9,681	53,140	98,622	80,723	102,854	74,379	144,184	213,949	283,735
Private crop and livestock insurance proceeds	8,178	8,086	1,306	3,619	5,664	4,796	4,084	3,888	3,888	3,888	3,888
Other revenues	6,652	7,434	4,834	18,966	12,930	12,626	13,024	13,486	13,486	13,486	13,486
Total operating revenues	440,972	410,086	436,821	458,336	503,616	615,174	693,625	648,994	612,925	576,856	540,787
Operating expenses											
Total crop expenses	3,985	4,422	2,174	11,632	8,318	8,504	9,253	8,729	8,729	8,729	8,729
Cattle purchases	737	1,267	2,674	1,737	802	486	540	540	540	540	540
Swine purchases	61,934	61,793	82,004	65,288	66,964	80,717	72,116	72,082	72,082	72,082	72,082
Other livestock purchases	0	0	0	0	0	0	0	0	0	0	0
Feed, supplements, straw and bedding	190,217	181,305	202,886	195,484	202,498	203,106	225,270	245,845	245,845	245,845	245,845
Veterinary fees, medicines and breeding fees	8,778	8,611	10,317	12,253	14,733	14,674	15,331	15,884	15,884	15,884	15,884
Other livestock expenses	264	130	121	0	0	0	0	0	0	0	0
Total livestock expenses	261,920	242,946	267,902	264,743	284,717	278,952	313,257	334,051	334,051	334,051	334,051
Small tools	90	373	425	635	586	608	620	645	645	645	645
Net fuel expenses (machinery, truck and auto)	5,999	6,058	6,207	5,171	5,919	7,547	6,949	6,578	6,578	6,578	6,578
Repairs, licenses and insurance	12,589	11,884	9,884	11,072	14,814	14,804	15,101	15,711	15,711	15,711	15,711
Total machinery expenses	18,588	18,283	16,516	16,779	21,030	22,960	22,669	23,234	23,234	23,234	23,234
Salaries (including CPP, QPP, EI)	27,371	24,180	27,786	30,224	28,294	29,143	29,880	30,171	30,171	30,171	30,171
Rent	1 709	1,887	1,849	3,399	2,334	2,240	2,240	2,240	2,240	2,240	2,240
Insurance	9,185	7,887	9,046	8,803	12,182	12,620	12,916	13,295	13,295	13,295	13,295
Total utilities (farm share)	11,547	10,949	12,067	13,661	14,924	15,998	16,786	16,820	16,820	16,820	16,820
Custom work and machine rental	6,822	7,236	8,819	9,194	10,067	10,389	10,680	10,894	10,894	10,894	10,894
Net interest expenses	26,558	22,877	21,331	26,755	36,580	45,698	47,247	46,944	46,944	46,944	46,944
Net property taxes	1,518	1,517	958	5,451	3,460	3,079	3,046	3,060	3,060	3,060	3,060
Building and fence repairs	9,962	8,974	8,749	9,079	10,643	10,898	10,803	11,019	11,019	11,019	11,019
Marketing expense	4,253	4,741	5,343	6,105	6,261	6,579	6,837	7,003	7,003	7,003	7,003
Miscellaneous expenses	6,990	5,589	3,806	20,048	14,119	14,737	14,309	13,540	13,540	13,540	13,540
Total operating expenses	390,468	361,467	384,116	425,572	453,225	481,574	498,622	523,000	523,000	523,000	523,000
Net operating income	50,504	48,619	52,505	32,763	50,391	153,600	195,003	125,994	89,925	53,856	17,788
NISA deposits	0	0	0	0	0	0	0	0	0	0	0
NISA withdrawals	0	0	0	0	0	0	0	0	0	0	0
Net operating income (after stabilization programs)	50,504	48,619	52,505	32,763	50,391	153,600	195,003	125,994	89,925	53,856	17,788
Capital cost allowance	38,130	29,265	30,585	33,072	41,907	43,620	46,482	46,814	46,814	46,814	46,814
Net farm income	22,374	19,353	21,920	-308	8,783	109,980	148,841	79,179	43,111	7,042	-29,027
Operating margin (before stabilization programs)	0.12	0.12	0.12	0.07	0.10	0.25	0.28	0.19	0.18	0.09	0.03

Ontario
Scenarios
Total Province
Hog
$250,000 - $499,999
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Summary	1995	1996	1997	1998	1999	Forecast 2000	Forecast 2001	Forecast Baseline 2002	20% Price Decrease 2002	40% Price Decrease 2002	60% Price Decrease 2002
Total Revenue from Market Receipts	472,899	418,337	463,978	384,160	410,262	540,870	599,883	577,339	476,514	375,688	274,863
Total Payments from Programs	20,819	6,194	12,078	7,443	70,552	33,573	18,914	7,073	7,073	7,073	7,073
Total Operating Revenues	493,218	424,531	466,056	391,603	480,814	574,443	618,577	584,412	483,586	382,761	281,936
Total Operating Expenses	411,271	367,201	384,596	353,800	403,357	425,858	449,160	460,550	460,550	458,160	458,126
Net Operating Income	81,948	57,330	81,459	37,803	77,457	148,585	169,417	123,861	23,036	-76,389	-173,189
Payments Generated											
NISA (Paid 2003)	0	6,348	648	40,294	21,649	0	0	0	57,964	119,068	112,986
CFIP/Disaster (Paid 2003)	0	0	0	0	0	0	0	0	30,089	103,921	106,946
Crop Insurance	2,391	3,633	486	1,762	1,404	1,163	7,944	1,706	1,706	1,706	1,706
NISA Closing Balances (Stabilization Year)											
Fund 1	29,385	36,830	44,275	51,130	58,578	66,020	73,465	80,910	66,184	0	0
Fund 2	24,114	28,801	39,089	11,186	1,946	14,989	28,380	43,258	0	0	0
Estimated number of farms	575	605	560	390	485	480	470	460			

Income Statement	1995	1996	1997	1998	1999	2000	2001	Baseline 2002	20% Price Decrease 2002	40% Price Decrease 2002	60% Price Decrease 2002
Operating revenues											
Total grains and oilseeds	43,007	48,262	38,363	46,419	39,296	39,354	37,083	37,885	37,885	37,885	37,885
Total other crops	1,463	2,562	1,979	1,742	2,468	2,646	2,615	2,744	2,744	2,744	2,744
Total crop revenues	44,470	50,825	40,342	48,161	41,760	41,900	39,678	40,409	40,409	40,409	40,409
Cattle	1,776	4,184	6,007	2,752	1,571	1,898	1,723	1,728	1,728	1,728	1,728
Swine	465,010	339,889	386,276	305,044	339,365	468,007	527,902	504,126	403,300	302,475	201,650
Dairy products and subsidies	1,811	1,344	1,811	1,811	2,276	2,348	2,419	2,487	2,487	2,487	2,487
Other livestock and products	4,780	2,828	3,966	6,882	4,442	4,789	5,169	5,403	5,403	5,403	5,403
Total livestock and product revenues	413,346	347,915	398,060	316,489	347,656	476,742	537,213	513,744	412,919	312,094	211,268
Total program payments	6,802	6,194	5,726	6,796	30,258	12,034	18,914	7,073	7,073	7,073	7,073
Private crop and livestock insurance proceeds	1,367	812	1,732	961	692	1,077	1,019	1,100	1,100	1,100	1,100
Other revenues	13,416	18,985	13,844	18,889	20,154	21,181	21,754	22,086	22,086	22,086	22,086
Total operating revenues	479,401	424,531	459,706	390,955	440,520	552,894	618,577	584,412	483,586	382,761	281,936
Operating expenses											
Total crop expenses	28,623	35,918	26,982	29,172	29,052	28,624	31,639	29,826	29,826	29,826	29,826
Cattle purchases	705	2,298	2,700	2,149	1,160	1,304	1,375	1,280	1,280	1,280	1,280
Swine purchases	62,810	45,671	52,954	42,068	53,041	59,537	62,881	58,664	58,664	58,664	58,664
Other livestock purchases	117	126	114	0	124	140	147	137	137	137	137
Feed, supplements, straw and bedding	163,170	133,333	153,173	127,234	144,269	147,310	155,304	172,734	172,734	172,734	172,734
Veterinary fees, medicines and breeding fees	7,137	6,790	7,038	6,533	8,925	9,032	9,436	9,777	9,777	9,777	9,777
Other livestock expenses	275	0	0	0	0	0	0	0	0	0	0
Total livestock expenses	224,214	187,219	215,979	177,984	207,519	217,423	233,144	242,493	242,493	242,493	242,493
Small tools	852	910	1,107	953	948	957	976	1,015	1,015	1,015	1,015
Net fuel expenses (machinery, truck and auto)	10,008	8,867	10,008	9,196	9,555	12,448	12,180	12,176	12,176	12,176	12,176
Repairs, licenses and insurance	14,499	12,833	14,365	13,713	12,578	12,729	12,984	13,509	13,509	13,509	13,509
Total machinery expenses	25,359	22,609	26,481	23,861	23,078	26,134	26,140	26,699	26,699	26,699	26,699
Salaries (including CPP, QPP, EI)	20,586	13,982	17,896	21,269	24,515	25,512	26,412	27,072	27,072	27,072	27,072
Rent	11,402	7,422	7,889	8,165	12,112	12,172	12,172	12,172	12,172	12,172	12,172
Insurance	6,892	4,524	5,834	6,209	6,411	6,731	6,935	7,156	7,156	7,156	7,156
Total utilities (farm share)	14,257	11,838	11,721	12,031	13,704	14,791	15,236	14,792	14,792	14,792	14,792
Custom work and machine rental	13,348	12,459	12,886	13,733	19,644	20,233	21,049	21,470	21,470	21,470	21,470
Net interest expenses	28,177	23,248	24,886	29,252	32,581	38,683	39,942	41,627	41,627	41,627	41,627
Net property taxes	4,146	4,803	3,986	3,063	2,436	2,448	2,460	2,472	2,472	2,472	2,472
Building and fence repairs	9,785	7,903	8,570	8,896	7,012	6,914	6,983	7,123	7,123	7,123	7,123
Marketing expense	5,702	2,920	3,276	2,536	4,133	4,360	4,561	4,635	4,635	4,635	4,635
Miscellaneous expenses	13,968	14,886	11,944	12,730	13,679	14,333	14,989	15,515	15,515	15,515	15,515
Total operating expenses	406,271	349,701	377,096	346,890	395,857	418,388	441,660	453,060	453,060	453,060	453,060
Net operating income	73,131	74,830	82,611	44,065	44,663	134,536	176,917	131,361	30,536	-70,299	-171,114
NISA deposits	5,000	7,500	7,500	6,910	7,500	7,500	7,500	7,500	6,100	2,075	0
NISA withdrawals	13,817	0	6,348	648	40,294	21,649	0	0	0	0	0
Net operating income (after stabilization programs)	81,948	67,330	81,459	37,803	77,457	148,585	169,417	123,861	23,036	-76,389	-173,189
Capital cost allowance	36,427	29,279	31,178	33,503	36,606	37,558	37,048	36,590	36,590	36,590	36,590
Net farm income	45,521	38,052	50,281	4,300	40,849	111,028	132,369	87,271	-13,554	-111,979	-209,779
Operating margin (before stabilization programs)	0.15	0.18	0.18	0.11	0.10	0.24	0.29	0.23	0.06	-0.18	-0.61

Ontario
Scenarios
Total Province
Grain and Oilseed
$100,000 - $249,999
3/27/02 2:20 PM

	1995	1996	1997	1998	1999	Forecast 2000	Forecast 2001	Forecast Baseline 2002	20% Yield Reduction 2002	40% Yield Reduction 2002	60% Yield Reduction 2002
Summary											
Total Revenue from Market Receipts	188,818	191,589	157,494	160,881	151,891	151,415	145,794	151,706	130,448	109,187	87,928
Total Payments from Programs	15,716	16,771	5,146	6,075	11,930	21,371	43,187	8,450	20,641	45,024	69,407
Total Operating Revenues	175,734	182,340	162,640	166,956	163,822	172,786	188,981	160,156	151,088	154,211	157,335
Total Operating Expenses	130,299	123,052	125,634	131,218	129,218	134,617	141,951	140,229	139,957	140,051	140,145
Net Operating Income	45,435	59,288	37,006	35,417	34,606	38,169	46,940	19,926	11,130	14,160	17,190
Payments Generated											
NISA (Paid 2003)	5,272	140	2,580	3,303	3,210	0	0	14,801	23,889	20,746	17,622
CFIP/Disaster (Paid 2003)	0	0	0	0	0	0	0	0	6,057	3,461	283
Crop Insurance	3,214	6,274	434	3,833	1,926	1,836	13,814	1,957	14,148	38,531	62,913
NISA Closing Balances (Stabilization Year)											
Fund 1	1,215	4,934	8,687	12,437	16,084	19,954	24,357	27,882	27,610	27,703	27,797
Fund 2	0	4,084	6,011	7,790	9,878	16,021	22,986	14,963	5,991	8,819	12,647
Estimated number of farms	2,490	2,370	2,365	2,435	2,450	2,570	2,760	2,860			

Income Statement	1995	1996	1997	1998	1999	2000	2001	Baseline 2002	20% Yield Reduction 2002	40% Yield Reduction 2002	60% Yield Reduction 2002
Operating revenues											
All wheat	24,586	16,106	6,813	11,372	12,478	10,850	12,726	13,758	11,888	9,818	7,548
Barley	1,320	827	570	682	410	367	809	527	527	527	527
Canola	518	3,437	996	813	1,019	1,166	1,034	1,043	1,043	1,043	1,043
Soybeans	33,210	48,849	65,421	55,401	51,586	57,228	60,439	49,248	35,399	25,549	19,699
Corn (grain and seed)	52,563	43,934	46,360	41,275	47,252	41,962	38,432	44,221	35,377	26,533	17,688
Field peas	0	0	0	0	0	0	0	0	0	0	0
Beans (white and coloured)	0	0	0	3,187	3,143	2,209	2,909	2,477	1,982	1,486	991
Lentils	0	0	0	0	0	0	0	0	0	0	0
Other grains and oilseeds	6,448	5,045	3,876	530	877	956	795	909	909	909	909
Total grains and oilseeds	118,625	117,966	123,938	123,460	116,767	114,489	108,843	112,184	90,925	69,866	48,407
Potatoes	52	122	32	54	52	54	44	49	49	49	49
Other crops	2,863	4,526	3,967	5,745	4,226	4,384	4,468	4,670	4,670	4,670	4,670
Total other crops	2,914	4,648	4,000	5,799	4,278	4,438	4,512	4,719	4,719	4,719	4,719
Total crop revenues	121,539	122,934	127,938	129,258	121,074	118,927	111,367	116,904	95,645	74,585	53,126
Total livestock and products revenues	22,906	13,457	7,934	9,943	8,517	9,811	10,548	10,429	10,429	10,429	10,429
Private crop and livestock insurance proceeds	783	993	1,776	2,379	1,940	1,534	1,984	1,943	1,943	1,943	1,943
Crop insurance payments	3,276	5,446	4,949	1,757	0	1,836	13,814	1,957	14,148	38,531	62,913
Disaster payments (incl. AIDA/CFIP)	0	0	0	0	0	0	0	0	0	0	0
Other program payments	0	53	48	1,737	8,627	18,525	29,372	6,493	6,493	6,493	6,493
Total insurance and program payments	4,084	6,391	6,773	5,874	10,467	19,896	44,871	10,293	22,484	46,967	71,250
Other revenues	14,796	14,584	19,858	18,980	20,489	21,362	22,114	22,530	22,530	22,530	22,530
Total operating revenues	163,298	157,967	162,491	164,955	160,518	169,577	188,891	160,156	151,088	154,211	157,335
Operating expenses											
Fertilizer and lime	19,980	19,783	18,758	20,146	19,884	17,767	21,496	18,274	18,274	18,274	18,274
Pesticides	8,923	8,812	10,648	10,190	10,476	10,880	10,954	11,118	11,118	11,118	11,118
Seed and plants	9,364	10,891	11,425	11,722	11,990	12,349	12,847	12,976	12,976	12,976	12,976
Containers, twine and baling wire	819	229	190	403	154	158	161	165	165	165	165
Other crop expenses	37	119	125	126	121	123	128	130	130	130	130
Total crop expenses	38,782	38,794	41,134	42,588	41,824	40,976	45,588	42,662	42,662	42,662	42,662
Total livestock expenses	12,488	7,813	4,283	7,716	5,330	5,879	6,058	6,130	6,130	6,130	6,130
Small tools	488	602	606	616	659	686	680	707	707	707	707
Net fuel expenses (machinery, truck and auto)	7,436	7,999	8,051	7,867	7,526	9,807	9,597	9,593	9,593	9,593	9,593
Repairs, licenses and insurance	10,846	10,483	9,478	9,748	9,676	9,793	9,968	10,382	10,382	10,382	10,382
Total machinery expenses	18,847	18,884	18,135	17,970	17,983	20,298	20,268	20,882	20,882	20,882	20,882
Salaries (including CPP, QPP, EI)	5,598	6,247	6,742	6,194	5,988	6,107	6,322	6,480	6,480	6,480	6,480
Rent	9,290	8,573	8,985	9,782	10,578	10,631	10,631	10,631	10,631	10,631	10,631
Insurance	3,882	2,891	4,550	4,942	3,258	2,906	2,986	3,216	3,216	3,216	3,216
Total utilities (farm share)	2,943	3,841	2,997	3,019	2,901	3,116	3,206	3,132	3,132	3,132	3,132
Custom work and machine rental	8,888	8,648	11,471	11,336	10,952	11,280	11,736	11,970	11,970	11,970	11,970
Net interest expenses	11,706	9,817	10,142	11,880	12,500	14,850	15,333	15,980	15,980	15,980	15,980
Net property taxes	3,809	3,919	4,196	2,827	2,896	2,710	2,723	2,737	2,737	2,737	2,737
Other expenses	12,244	11,801	9,369	9,369	11,744	12,189	12,643	13,020	13,020	13,020	13,020
Total operating expenses	127,742	119,277	121,826	127,414	125,514	130,892	137,483	136,860	136,860	136,860	136,860
Net operating income	35,547	37,790	40,665	36,541	35,005	38,685	51,398	23,296	14,438	17,561	20,685
NISA deposits	2,588	3,774	3,866	3,804	3,702	3,926	4,458	3,589	3,366	3,401	3,495
NISA withdrawals	12,446	5,272	140	2,580	3,303	3,210	0	0	0	0	0
Net operating income (after stabilization programs)	45,435	39,288	37,006	35,417	34,606	38,169	46,940	19,926	11,130	14,160	17,190
Capital cost allowance	17,971	17,318	16,884	19,578	21,494	22,882	21,783	21,484	21,484	21,484	21,484
Net farm income	27,464	21,970	18,362	15,830	13,111	16,117	25,187	-1,557	-10,353	-7,323	-4,294
Operating margin (before stabilization programs)	0.22	0.24	0.25	0.22	0.22	0.23	0.27	0.15	0.10	0.11	0.13

Manitoba
Scenarios
Total Province
Grain and Oilseed
$250,000 - $499,999
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	1995	1996	1997	1998	1999	Forecast 2000	Forecast 2001	Forecast Baseline 2002	20% Yield Reduction 2002	40% Yield Reduction 2002	60% Yield Reduction 2002
Summary											
Total Revenue from Market Receipts	295,881	322,414	347,719	340,435	354,802	340,381	404,882	391,489	338,866	281,921	227,176
Total Payments from Programs	27,497	10,141	10,897	5,342	15,982	14,532	39,142	5,773	5,773	47,062	88,330
Total Operating Revenues	323,048	332,555	358,416	345,776	370,085	354,883	443,994	397,182	342,438	328,972	315,506
Total Operating Expenses	248,780	274,739	281,637	282,813	304,629	327,082	354,002	347,081	347,081	347,081	346,929
Net Operating Income	74,298	57,816	76,779	62,963	65,456	27,830	89,991	50,102	-4,643	-18,108	-31,402
Payments Generated											
NISA (Paid 2003)	0	0	0	6,210	0	27,998	0	1,016	66,790	89,228	82,992
CFIP/Disaster (Paid 2003)	0	0	0	0	0	0	0	0	15,891	29,347	43,986
Crop Insurance	3,019	5,812	5,668	3,314	5,831	3,406	3,663	4,809	4,809	46,067	87,366
NISA Closing Balances (Stabilization Year)											
Fund 1	29,269	36,714	44,159	51,604	59,049	66,494	73,939	81,384	81,384	81,384	81,212
Fund 2	25,294	30,367	47,520	54,713	58,922	57,338	72,582	68,479	33,738	20,269	6,812
Estimated number of farms	1,095	1,265	1,335	1,310	1,145	1,520	1,630	1,730			
Income Statement	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**Baseline 2002**	**20% Yield Reduction 2002**	**40% Yield Reduction 2002**	**60% Yield Reduction 2002**
Operating revenues											
All wheat	144,641	125,219	115,415	85,339	91,850	82,508	103,230	90,986	76,389	60,083	44,778
Barley	15,136	18,818	23,992	18,011	13,976	16,301	21,575	21,911	17,827	13,743	9,659
Canola	44,823	74,438	87,152	116,996	97,294	80,677	111,477	101,167	80,933	60,700	40,467
Soybeans	251	327	336	111	219	0	0	0	0	0	0
Corn (grain and seed)	2,742	3,582	3,686	3,713	5,674	6,532	5,681	5,634	5,634	5,634	5,634
Field peas	0	0	0	5,849	5,071	4,671	6,598	6,833	6,833	6,833	6,833
Beans (white and coloured)	0	0	0	6,433	15,700	19,510	19,023	20,224	16,179	12,134	8,089
Lentils	0	0	0	507	830	1,221	825	1,063	1,063	1,063	1,063
Other grains and oilseeds	31,283	50,895	56,321	42,778	40,820	43,412	50,196	55,378	44,302	33,227	22,151
Total grains and oilseeds	238,874	273,090	286,902	291,736	271,433	264,833	318,302	302,996	248,181	193,418	138,672
Potatoes	70	297	0	0	75	60	71	73	73	73	73
Other crops	5,017	5,951	4,582	5,012	5,217	5,091	5,375	5,434	5,434	5,434	5,434
Total other crops	5,087	6,248	4,582	5,012	5,291	5,151	5,446	5,506	5,506	5,506	5,506
Total crop revenues	343,962	279,339	291,384	296,747	276,725	269,985	323,748	308,411	253,687	198,923	144,179
Total livestock and products revenues	20,898	20,244	30,466	22,220	36,793	42,620	51,334	51,987	51,987	51,987	51,987
Private crop and livestock insurance proceeds	6,746	2,099	4,823	7,536	10,217	17,371	8,948	9,593	9,593	9,593	9,593
Crop insurance payments	10,511	9,981	2,982	3,686	2,860	3,406	3,553	4,809	4,809	46,067	87,366
Disaster payments (incl. AIDA/CFIP)	0	0	0	0	0	0	0	0	0	0	0
Other program payments	6,881	160	7,718	1,656	6,713	11,125	7,601	964	964	964	964
Total insurance and program payments	23,837	12,240	15,520	12,877	19,890	31,903	20,102	15,366	15,366	56,646	97,923
Other revenues	24,148	20,732	21,047	23,932	30,768	20,376	20,822	21,418	21,418	21,418	21,418
Total operating revenues	312,843	332,555	358,416	345,776	363,675	354,883	416,006	397,182	342,438	328,972	315,506
Operating expenses											
Fertilizer and lime	48,770	52,891	54,497	53,766	51,884	55,298	71,275	53,613	53,613	53,613	53,613
Pesticides	31,403	34,688	36,625	39,570	38,476	41,208	40,798	41,407	41,407	41,407	41,407
Seed and plants	17,009	18,973	20,039	23,514	21,670	22,636	23,436	23,907	23,907	23,907	23,907
Containers, twine and baling wire	348	250	232	202	173	180	189	193	193	193	193
Other crop expenses	18	8	53	51	51	54	54	55	55	55	55
Total crop expenses	97,447	106,810	111,446	117,103	111,964	119,376	135,751	129,175	129,175	129,175	129,175
Total livestock expenses	8,871	9,539	13,687	12,411	19,010	22,309	30,138	27,607	27,607	27,607	27,607
Small tools	621	742	755	667	691	715	733	762	762	762	762
Net fuel expenses (machinery, truck and auto)	15,335	17,448	17,989	15,684	18,088	22,339	23,009	21,858	21,858	21,858	21,858
Repairs, licenses and insurance	17,230	19,790	20,406	19,512	20,804	21,637	22,089	22,961	22,961	22,961	22,961
Total machinery expenses	33,186	37,890	39,152	36,863	39,683	44,694	46,811	46,582	46,582	46,582	46,582
Salaries (including CPP, QPP, EI)	17,178	17,016	17,536	18,826	19,014	19,584	19,678	20,276	20,276	20,276	20,276
Rent	16,883	17,307	18,235	19,826	22,691	22,790	22,632	22,632	22,632	22,632	22,632
Insurance	5,586	7,075	11,715	13,419	5,364	5,486	5,755	5,997	5,997	5,997	5,997
Total utilities (farm share)	3,276	3,774	4,066	3,693	4,121	4,366	4,545	4,578	4,578	4,578	4,578
Custom work and machine rental	13,153	17,389	16,177	17,980	20,667	21,308	21,621	21,961	21,961	21,961	21,961
Net interest expenses	17,427	17,208	16,614	17,024	20,211	23,976	24,445	25,184	25,184	25,184	25,184
Net property taxes	4,892	5,368	5,751	5,870	6,181	6,212	6,243	6,274	6,274	6,274	6,274
Other expenses	22,071	28,032	19,788	16,319	27,312	28,880	29,853	30,566	30,566	30,566	30,566
Total operating expenses	243,780	267,239	274,137	275,313	297,129	319,662	346,502	339,581	339,581	339,581	339,581
Net operating income	68,893	65,316	84,280	70,462	66,746	35,330	69,504	57,602	2,857	-10,608	-24,074
NISA deposits	5,000	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,328
NISA withdrawals	10,406	0	0	0	6,210	0	27,998	0	0	0	0
Net operating income (after stabilization programs)	74,298	57,816	76,780	62,962	66,456	27,830	89,991	50,102	-4,643	-18,108	-31,402
Capital cost allowance	37,947	40,721	46,876	44,306	48,631	48,316	48,017	47,189	47,189	47,189	47,189
Net farm income	36,351	17,096	29,903	18,656	16,824	-20,486	41,975	2,942	-51,802	-65,268	-78,562
Operating margin (before stabilization programs)	0.22	0.20	0.24	0.20	0.18	0.10	0.17	0.15	0.01	-0.03	-0.09

Manitoba
Scenarios
Total Province
Grain and Oilseed
$50,000 - $99,999
3/27/02 2:21 PM

	1996	1996	1997	1998	1999	Forecast 2000	Forecast 2001	Forecast Baseline 2002	20% Yield Reduction 2002	40% Yield Reduction 2002	60% Yield Reduction 2002
Summary											
Total Revenue from Market Receipts	66,491	70,071	74,462	78,986	72,241	71,276	83,770	80,479	69,725	56,971	48,218
Total Payments from Programs	7,414	4,581	4,260	896	6,944	10,280	9,602	1,960	1,960	16,338	29,809
Total Operating Revenues	72,906	74,662	78,722	77,842	79,185	81,556	93,371	82,339	71,686	74,306	77,028
Total Operating Expenses	56,267	61,412	60,008	65,806	66,839	71,020	76,948	75,253	74,930	75,012	75,094
Net Operating Income	16,637	13,340	18,714	12,036	13,346	10,536	16,426	7,086	-3,345	-706	1,933
Payments Generated											
NISA (Paid 2003)	1,828	1,914	0	3,782	3,786	4,694	0	2,986	13,709	10,969	8,299
CFIP/Disaster (Paid 2003)	0	0	0	0	0	0	0	0	5,839	3,037	236
Crop Insurance	949	1,662	1,634	1,143	1,874	1,080	1,176	1,535	1,535	15,009	28,483
NISA Closing Balances (Stabilization Year)											
Fund 1	6,936	8,786	10,853	12,496	14,247	16,063	18,167	20,067	18,643	19,826	19,907
Fund 2	4,226	4,696	7,704	7,061	6,460	5,283	5,973	9,913	0	1,810	4,422
Estimated number of farms	2,880	2,880	2,540	2,466	2,125	2,140	2,030	1,890			
Income Statement	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**Baseline 2002**	**20% Yield Reduction 2002**	**40% Yield Reduction 2002**	**60% Yield Reduction 2002**
Operating revenues											
All wheat	33,462	31,063	25,236	20,267	21,210	19,053	23,837	20,943	17,409	13,874	10,340
Barley	3,784	4,242	5,902	4,126	4,001	4,667	6,177	6,273	5,104	3,935	2,766
Canola	6,962	11,151	13,709	24,262	17,786	14,734	20,345	18,463	14,771	11,078	7,386
Soybeans	59	84	66	71	68	0	0	0	0	0	0
Corn (grain and seed)	423	440	454	485	485	536	466	462	462	462	462
Field peas	0	0	0	1,178	716	680	931	965	965	965	965
Beans (white and coloured)	0	0	0	1,699	2,216	2,784	2,685	2,884	2,284	1,713	1,142
Lentils	0	0	0	102	117	172	74	180	180	180	180
Other grains and oilseeds	5,990	8,544	11,581	8,141	6,770	7,200	8,404	8,932	7,148	5,389	3,573
Total grains and oilseeds	50,241	55,504	56,970	50,343	53,320	49,795	62,920	59,043	48,290	37,535	25,781
Potatoes	10	0	44	11	11	9	10	10	10	10	10
Other crops	1,841	1,538	1,225	908	687	688	694	701	701	701	701
Total other crops	1,851	1,538	1,268	920	676	696	704	711	711	711	711
Total crop revenues	52,092	57,042	58,138	51,263	53,996	50,491	63,623	59,754	49,000	38,247	27,493
Total livestock and products revenues	5,882	5,715	6,066	6,390	7,386	8,190	9,711	9,878	9,878	9,878	9,878
Private crop and livestock insurance proceeds	1,401	435	1,819	1,867	2,913	4,963	2,691	2,736	2,736	2,736	2,736
Crop insurance payments	2,365	2,704	654	611	887	1,080	1,176	1,535	1,535	15,009	28,483
Disaster payments (incl. AIDA/CFIP)	0	0	0	0	0	0	0	0	0	0	0
Other program payments	1,481	49	1,992	275	2,386	5,404	3,731	325	325	325	325
Total insurance and program payments	5,248	3,188	4,166	2,853	6,075	11,437	7,468	4,596	4,596	18,070	31,544
Other revenues	6,416	6,879	8,439	7,636	7,975	7,702	7,884	8,112	8,112	8,112	8,112
Total operating revenues	**69,337**	**72,825**	**76,808**	**77,841**	**75,403**	**77,780**	**88,677**	**82,339**	**71,586**	**74,306**	**77,028**
Operating expenses											
Fertilizer and lime	10,969	11,714	11,976	12,765	11,319	12,134	15,639	13,968	13,968	13,968	13,968
Pesticides	5,708	6,180	6,931	7,065	6,816	7,360	7,227	7,336	7,336	7,336	7,336
Seed and plants	2,863	3,427	4,149	4,990	4,257	4,428	4,806	4,997	4,997	4,997	4,997
Containers, twine and baling wire	127	106	72	123	89	71	75	76	76	76	76
Other crop expenses	3	0	8	0	0	0	0	0	0	0	0
Total crop expenses	19,670	21,428	23,136	24,943	22,481	23,933	27,846	26,067	26,067	26,067	26,067
Total livestock expenses	2,804	2,099	2,113	2,717	3,383	3,919	5,267	4,836	4,836	4,836	4,836
Small tools	361	466	374	427	399	416	423	440	440	440	440
Net fuel expense (machinery, truck and auto)	5,864	6,464	6,123	6,808	6,252	7,721	7,963	7,555	7,555	7,555	7,555
Repairs, licenses and insurance	6,883	6,767	6,634	6,281	6,236	6,485	6,814	6,881	6,881	6,881	6,881
Total machinery expenses	12,107	13,676	12,130	12,487	12,886	14,621	14,990	14,877	14,877	14,877	14,877
Salaries (including CPP, QPP, EI)	2,198	1,980	2,282	2,011	2,388	2,439	2,475	2,525	2,525	2,525	2,525
Rent	1,808	1,995	2,284	3,067	2,888	2,897	2,988	2,968	2,968	2,968	2,968
Insurance	1,437	1,068	2,376	2,885	1,100	1,121	984	1,019	1,019	1,019	1,019
Total utilities (farm share)	1,289	1,428	1,832	1,806	1,896	1,843	1,880	1,899	1,899	1,899	1,899
Custom work and machine rental	2,217	3,239	2,803	4,186	4,061	4,183	4,225	4,310	4,310	4,310	4,310
Net interest expenses	3,885	4,100	3,219	3,899	4,362	5,210	5,312	5,468	5,468	5,468	5,468
Net property taxes	1,901	2,163	2,360	2,363	2,637	2,680	2,863	2,877	2,877	2,877	2,877
Other expenses	5,883	6,391	4,035	3,885	6,283	6,534	6,776	6,947	6,947	6,947	6,947
Total operating expenses	**55,071**	**59,526**	**58,968**	**63,918**	**64,024**	**69,149**	**74,796**	**73,288**	**73,288**	**73,288**	**73,288**
Net operating income	**14,266**	**13,299**	**18,740**	**13,924**	**11,379**	**8,611**	**13,881**	**9,051**	**-1,703**	**1,018**	**3,738**
NISA deposits	1,196	1,087	1,940	1,886	1,815	1,871	2,180	1,985	1,842	1,724	1,866
NISA withdrawals	3,668	1,828	1,914	0	3,782	3,786	4,694	0	0	0	0
Net operating income (after stabilization programs)	**16,637**	**13,240**	**18,714**	**12,036**	**13,346**	**10,536**	**16,426**	**7,086**	**-3,345**	**-706**	**1,933**
Capital cost allowance	**9,142**	**8,941**	**7,862**	**9,117**	**10,111**	**10,046**	**9,983**	**9,805**	**9,805**	**9,805**	**9,805**
Net farm income	**7,496**	**4,299**	**10,852**	**2,919**	**3,235**	**491**	**6,443**	**-2,718**	**-13,149**	**-10,511**	**-7,872**
Operating margin (before stabilization programs)	0.21	0.18	0.24	0.18	0.18	0.11	0.16	0.11	-0.02	0.01	0.05

Saskatchewan
Scenarios
Total Province
Grain and Oilseed
$100,000 - $249,999
3/27/02 2:21 PM

Summary	1995	1996	1997	1998	1999	Forecast 2000	Forecast 2001	Forecast Baseline 2002	20% Yield Reduction 2002	40% Yield Reduction 2002	60% Yield Reduction 2002
Total Revenue from Market Receipts	138,406	149,853	160,805	162,012	163,628	161,881	165,901	164,799	144,231	123,662	103,094
Total Payments from Programs	10,536	10,859	2,599	1,475	4,374	18,052	12,781	11,639	11,636	36,288	60,940
Total Operating Revenues	148,945	160,712	163,404	163,488	167,902	179,844	178,283	176,438	155,867	159,950	164,034
Total Operating Expenses	103,537	125,211	123,516	127,067	129,416	140,936	150,860	152,438	151,821	151,943	152,066
Net Operating Income	45,408	35,501	39,889	36,420	28,487	38,708	27,402	23,997	4,046	8,007	11,968
Payments Generated											
NISA (Paid 2003)	0	0	0	0	3,993	0	7,284	14,312	34,880	30,796	26,713
CFIP/Disaster (Paid 2003)	0	0	0	0	0	0	0	0	14,840	10,533	6,429
Crop Insurance	1,831	3,960	2,335	1,623	3,344	2,217	4,489	2,847	2,847	27,299	51,951
NISA Closing Balances (Stabilization Year)											
Fund 1	13,722	17,923	22,063	26,187	30,186	34,683	38,930	43,006	42,389	42,511	42,634
Fund 2	17,178	23,386	29,574	37,001	40,891	50,231	62,296	47,752	28,496	30,715	34,936
Estimated number of farms	12,300	13,100	12,300	11,270	10,860	13,200	13,780	14,360			

Income Statement	1995	1996	1997	1998	1999	2000	2001	Baseline 2002	20% Yield Reduction 2002	40% Yield Reduction 2002	60% Yield Reduction 2002
Operating revenues											
All wheat	63,257	68,875	68,148	68,814	49,432	48,980	51,548	51,965	43,816	35,678	27,539
Barley	10,337	14,282	13,884	12,969	12,083	13,789	16,089	14,240	11,824	9,409	6,994
Canola	15,525	22,876	29,561	37,173	34,628	32,474	37,823	32,696	26,189	19,819	13,079
Soybeans	23	17	22	23	22	0	0	0	0	0	0
Corn (grain and seed)	30	36	37	36	37	0	0	0	0	0	0
Field peas	0	0	0	5,814	6,764	7,206	7,596	9,379	7,803	5,627	3,782
Beans (white and coloured)	0	0	0	0	0	0	0	0	0	0	0
Lentils	0	0	0	3,808	6,831	8,485	5,625	7,996	6,397	4,798	3,198
Other grains and oilseeds	11,833	16,579	19,497	12,300	10,729	11,847	11,341	12,745	12,745	12,745	12,745
Total grains and oilseeds	101,006	122,848	131,139	130,788	120,426	123,844	130,020	129,012	108,444	87,676	67,367
Potatoes	6	21	7	7	7	6	7	7	7	7	7
Other crops	1,442	1,491	1,549	1,393	1,399	1,480	1,628	1,637	1,637	1,637	1,637
Total other crops	1,449	1,512	1,555	1,400	1,406	1,486	1,635	1,645	1,645	1,645	1,645
Total crop revenues	102,464	124,160	132,694	132,188	121,831	125,130	131,655	130,657	110,088	89,320	68,981
Total livestock and products revenues	9,457	10,247	12,046	13,349	13,906	14,080	16,463	16,163	16,163	16,163	16,163
Private crop and livestock insurance proceeds	4,202	3,983	3,191	3,522	4,760	10,416	5,940	6,030	6,030	6,030	6,030
Crop insurance payments	2,329	3,803	1,120	1,099	2,991	2,217	4,489	2,847	2,847	27,299	51,951
Disaster payments (incl. AIDA/CFIP)	0	0	0	0	0	0	0	0	0	0	0
Other program payments	2,254	7,386	1,479	376	1,383	11,883	8,323	1,764	1,764	1,764	1,764
Total insurance and program payments	8,785	14,842	5,790	4,997	9,074	24,515	18,730	10,382	10,382	35,094	59,686
Other revenues	22,295	11,463	12,575	12,962	13,090	11,925	11,434	11,960	11,960	11,960	11,960
Total operating revenues	142,992	160,712	163,404	163,487	157,901	175,681	178,283	169,161	148,583	152,666	156,760
Operating expenses											
Fertilizer and lime	16,418	17,726	18,626	19,338	18,007	20,330	23,064	25,047	25,047	25,047	25,047
Pesticides	10,721	12,237	14,314	15,192	16,415	16,415	15,894	16,819	16,819	16,819	16,819
Seed and plants	4,193	4,628	7,704	8,468	8,332	8,332	8,067	8,979	8,979	8,979	8,979
Containers, twine and baling wire	103	129	93	123	107	110	115	118	118	118	118
Other crop expenses	18	6	1	19	7	7	7	7	7	7	7
Total crop expenses	31,451	34,727	40,738	43,141	42,868	45,194	51,948	50,771	50,771	50,771	50,771
Total livestock expenses	4,889	5,034	5,219	5,896	5,795	8,808	12,804	11,792	11,792	11,792	11,792
Small tools	653	857	760	759	796	790	806	838	838	838	838
Net fuel expenses (machinery, truck and auto)	10,904	11,624	11,988	10,883	11,913	15,432	15,677	15,094	15,094	15,094	15,094
Repairs, licenses and insurance	11,169	12,837	11,822	11,221	11,799	12,183	12,306	12,897	12,897	12,897	12,897
Total machinery expenses	22,426	25,218	24,827	22,863	24,478	28,374	28,778	28,828	28,828	28,828	28,828
Salaries (including CPP, QPP, EI)	6,212	6,606	6,578	6,931	6,820	7,024	7,068	7,589	7,589	7,589	7,589
Rent	3,989	3,884	4,326	4,810	5,124	5,113	4,980	5,160	5,160	5,160	5,160
Insurance	2,627	3,295	3,310	3,795	2,282	2,079	2,480	2,894	2,894	2,894	2,894
Total utilities (farm share)	2,016	2,378	2,679	2,535	2,521	2,611	2,715	2,884	2,884	2,884	2,884
Custom work and machine rental	6,189	8,918	7,960	8,480	8,720	9,069	8,525	9,217	9,217	9,217	9,217
Net interest expenses	8,537	8,960	8,814	9,289	9,997	10,782	11,004	11,335	11,335	11,335	11,335
Net property taxes	4,166	4,726	4,754	5,067	4,882	4,914	3,677	4,955	4,955	4,955	4,955
Other expenses	8,880	17,220	8,715	8,301	12,004	12,536	12,808	13,340	13,340	13,340	13,340
Total operating expenses	101,079	120,956	119,320	122,889	125,361	138,506	148,488	148,307	148,307	148,307	148,307
Net operating income	41,912	39,756	44,084	40,599	32,540	39,146	31,824	20,845	276	4,360	8,443
NISA deposits	2,497	4,255	4,195	4,179	4,064	4,431	4,422	4,131	3,814	3,637	3,769
NISA withdrawals	5,964	0	0	0	0	3,993	0	7,284	7,284	7,284	7,284
Net operating income (after stabilization programs)	45,408	35,501	39,889	36,420	28,486	38,708	27,402	23,997	4,046	8,007	11,968
Capital cost allowance	19,189	20,609	22,587	24,067	24,125	23,870	23,671	23,202	23,202	23,202	23,202
Net farm income	26,220	14,892	17,302	12,363	4,361	14,838	3,832	795	-19,156	-15,196	-11,234
Operating margin (before stabilization programs)	0.29	0.25	0.27	0.25	0.21	0.22	0.18	0.12	0.00	0.03	0.05

Alberta
Scenarios
Total Province
Cattle
$100,000 - $249,999
3/27/02 2:22 PM

Summary	1995	1996	1997	1998	1999	Forecast 2000	Forecast 2001	Forecast Baseline 2002	20% Price Decrease 2002	40% Price Decrease 2002	60% Price Decrease 2002
Total Revenue from Market Receipts	176,406	188,262	192,199	201,275	205,203	227,185	251,914	263,935	211,720	169,506	127,291
Total Payments from Programs	3,089	5,298	5,712	4,783	3,434	20,005	25,948	1,718	1,718	1,718	1,718
Total Operating Revenues	179,483	193,558	197,912	206,058	209,638	247,190	277,862	265,652	213,438	171,223	129,008
Total Operating Expenses	157,589	168,484	170,287	173,235	176,391	192,054	204,307	204,398	203,089	201,823	200,656
Net Operating Income	21,895	25,074	27,625	32,823	33,247	54,537	73,555	61,297	10,348	-30,600	-71,648
Payments Generated											
NISA (Paid 2003)	0	0	0	0	0	0	0	0	28,398	28,096	25,415
CFIP/Disaster (Paid 2003)	0	0	0	0	0	0	0	0	16,434	49,092	80,568
Crop Insurance	658	814	862	783	848	882	782	853	853	853	853
NISA Closing Balances (Stabilization Year)											
Fund 1	0	0	0	0	0	4,884	10,108	14,883	2,379	0	0
Fund 2	0	0	0	0	0	5,349	11,969	18,894	0	0	0
Estimated number of farms	4,025	3,130	4,180	4,325	4,720	4,480	4,520	4,590			

Income Statement	1995	1996	1997	1998	1999	2000	2001	Baseline 2002	20% Price Decrease 2002	40% Price Decrease 2002	60% Price Decrease 2002
Operating revenues											
Total grains and oilseeds	14,959	17,250	14,989	14,686	15,380	15,096	16,483	17,814	17,814	17,814	17,814
Total other crops	2,814	4,277	3,868	4,052	3,889	4,231	4,486	4,438	4,438	4,438	4,438
Total crop revenues	17,583	21,529	18,737	18,737	19,270	19,326	20,968	22,252	22,252	22,252	22,252
Cattle	139,179	147,486	154,040	160,221	166,007	186,827	210,827	211,074	168,859	126,644	84,429
Swine	2,124	1,972	694	2,966	617	896	1,025	987	987	987	987
Dairy products and subsidies	222	189	436	87	87	85	88	90	90	90	90
Other livestock and products	1,001	686	963	856	1,092	1,156	1,848	1,903	1,903	1,903	1,903
Total livestock and product revenues	142,526	150,333	156,132	163,818	167,803	188,782	213,488	214,064	171,839	129,624	87,410
Total program payments	3,089	5,298	5,712	4,783	3,434	20,006	25,948	1,718	1,718	1,718	1,718
Private crop and livestock insurance proceeds	1,808	700	1,183	1,806	1,706	4,067	2,111	2,176	2,176	2,176	2,176
Other revenues	14,788	15,732	16,148	16,724	17,424	15,040	15,326	15,484	15,484	15,484	15,484
Total operating revenues	179,483	193,558	197,912	206,068	209,638	247,190	277,862	255,652	213,438	171,223	129,008
Operating expenses											
Total crop expenses	8,986	10,468	10,435	10,825	11,899	12,188	13,016	12,019	12,019	12,019	12,019
Cattle purchases	60,810	48,660	55,462	56,357	56,349	60,001	65,476	64,312	64,312	64,312	64,312
Swine purchases	298	290	96	891	26	28	31	30	30	30	30
Other livestock purchases	19	41	21	4	21	23	25	25	25	25	25
Feed, supplements, straw and bedding	14,363	20,735	19,303	20,193	18,082	18,375	19,838	20,783	20,783	20,783	20,783
Veterinary fees, medicines and breeding fees	3,902	4,804	4,799	4,296	4,836	4,878	4,887	5,084	5,084	5,084	5,084
Other livestock expenses	187	89	0	0	0	0	0	0	0	0	0
Total livestock expenses	79,278	74,320	79,812	80,861	78,115	83,106	90,257	90,213	90,213	90,213	90,213
Small tools	876	1,099	1,027	1,231	1,073	1,166	1,175	1,222	1,222	1,222	1,222
Net fuel expenses (machinery, truck and auto)	8,595	10,625	10,884	9,796	10,778	14,646	14,683	13,949	13,949	13,949	13,949
Repairs, licenses and insurance	10,316	12,510	13,046	12,549	13,497	13,992	14,782	15,379	15,379	15,379	15,379
Total machinery expenses	19,779	24,133	24,966	23,576	25,345	29,583	30,640	30,550	30,550	30,550	30,550
Salaries (including CPP, QPP, EI)	6,894	8,525	8,477	7,278	7,317	7,836	7,833	8,270	8,270	8,270	8,270
Rent	4,226	5,366	5,254	5,865	6,296	6,421	6,238	6,480	6,480	6,480	6,480
Insurance	2,325	2,633	3,218	3,750	2,727	2,808	2,916	3,014	3,014	3,014	3,014
Total utilities (farm share)	2,812	3,181	3,088	2,809	3,084	3,279	3,439	3,325	3,325	3,325	3,325
Custom work and machine rental	7,679	9,870	10,620	10,830	10,997	9,999	10,483	10,882	10,882	10,882	10,882
Net interest expenses	14,705	16,012	13,420	14,610	16,497	18,024	18,474	19,191	19,191	19,191	19,191
Net property taxes	1,900	1,961	1,886	1,849	2,031	2,072	2,082	2,093	2,093	2,093	2,093
Building and fence repairs	3,048	3,291	4,027	4,286	4,176	4,083	4,134	4,216	4,216	4,216	4,216
Marketing expense	1,116	1,983	1,446	1,886	1,831	1,822	1,711	1,720	1,720	1,720	1,720
Miscellaneous expenses	5,122	6,832	5,778	5,801	6,806	6,823	7,844	7,873	7,873	7,873	7,873
Total operating expenses	157,589	168,484	170,287	173,235	176,391	187,904	196,838	198,846	198,846	198,846	198,846
Net operating income	21,895	25,074	27,625	32,823	33,247	59,286	79,024	56,107	13,992	-28,323	-70,837
NISA deposits	0	0	0	0	0	4,749	5,499	4,910	3,644	2,277	1,011
NISA withdrawals	0	0	0	0	0	0	0	0	0	0	0
Net operating income (after stabilization programs)	21,895	25,074	27,625	32,823	33,247	54,537	73,555	61,297	10,348	-30,600	-71,848
Capital cost allowance	19,326	21,089	22,906	23,382	25,365	25,481	25,229	24,739	24,739	24,739	24,739
Net farm income	2,568	3,985	4,819	9,441	7,982	29,055	48,326	36,558	-14,390	-55,339	-96,587
Operating margin (before stabilization programs)	0.12	0.13	0.14	0.16	0.16	0.24	0.28	0.22	0.07	-0.17	-0.55

A8. CANADA-ONTARIO FRAMEWORK AGREEMENT ON AGRICULTURAL RISK MANAGEMENT

THIS AGREEMENT made this 5 day of July, 2000

BETWEEN THE GOVERNMENTS OF:

CANADA (referred to as "Canada"), as represented by the Minister of Agriculture and Agri-Food,

OF THE FIRST PART;

- and -

ONTARIO (referred to as "the Province"), as represented by the Minister of Agriculture, Food and Rural Affairs,

OF THE SECOND PART.

WHEREAS each of the parties desires to collaborate in establishing a framework for the negotiation and management of agricultural risk management programs for farmers;

WHEREAS both parties have the necessary legislative authorities to enter into this Agreement;

WHEREAS separate agreements which will be the same as this Agreement in all material aspects shall be concluded between Canada and other Provinces;

THEREFORE the parties agree as follows:

8.1 Definitions

- "Agreement" means the Canada-Ontario Framework Agreement on Agricultural Risk Management.
- "Common Disaster Program Conditions" means the program eligibility and payment calculation provisions for Income Disaster Assistance Programming which are jointly agreed to by Canada and the Province, cost-shared on a federal-provincial basis and implemented nationally.
- "Fall Cash Advance Program" means the Advance Payments Program as provided for under the *Agricultural Marketing Programs Act*.
- "Federal Disaster Program Conditions" means the Common Disaster Program Conditions and any Supplemental Disaster Program Conditions implemented nationally for Income Disaster Assistance Programming which are funded by Canada.
- "General Risk Management Programming" means the NISA Program, the Fall Cash Advance Program, and other nationally-based programs or province-based programs, including crop production risk management programs and industry development programs, which are eligible for or counted for federal-provincial cost-sharing and for which federal funding would be provided from funds allocated to Signatory Provinces.

- "Income Disaster Assistance Programming" means programming which targets payments to farmers incurring significant reductions in farm income in any one year for reasons beyond their control.

- "NISA Program" means the Net Income Stabilization Account (NISA) Program established under the Federal-Provincial Agreement establishing the Net Income Stabilization Account Program.

- "Provinces" means the provinces of Canada and includes the Yukon Territory, the Northwest Territories, and Nunavut Territory.

- "Provincial Disaster Program Conditions" means the Common Disaster Program Conditions and any Supplemental Disaster Program Conditions for Income Disaster Assistance Programming which are funded by the Province.

- "Signatory Provinces" means all provinces that have concluded parallel Framework Agreements on Agricultural Risk Management with Canada.

- "Spring Cash Advance Program" means the program funded by Canada which provides a repayment guarantee for short-term loans to farmers and reimbursement of the interest on those loans for the 2000 and 2001 crop years.

- "Supplemental Disaster Program Conditions" means the program eligibility and payment calculation provisions for Income Disaster Assistance Programming which are funded by either Canada, the Province, or both parties and are not part of the Common Disaster Program Conditions.

8.2 Purpose

This Agreement provides a framework for federal-provincial negotiation and management of agricultural risk management programs which are eligible or counted for federal-provincial cost-sharing, including, but not limited to, the Net Income Stabilization Account (NISA) Program, income disaster programming, and other province-based risk management programs (including crop production risk management programs). This Agreement sets out the objectives and principles to inform and guide the development of these programs; parameters and disciplines on the design of programs; and responsibilities for funding, coordination, periodic reform, monitoring and management.

8.3 Objective

The policy objective of this Agreement is to promote the management of risk and reduce its impact, including, but not limited to, income stabilization. In pursuing this objective, the parties intend to share with farmers the management of normal business risk through funding of programs, and promotion of private sector risk management tools and best management practices; and to target Income Disaster Assistance Programming to those farmers facing the most severe income variation, where variation is seen as up to a three to five-year period.

8.4 Principles

Program principles

Production, Market Neutrality	Programs should not influence farmers' production and marketing decisions and should not distort regional comparative advantage.
Trade Neutrality	Programs should minimize countervail risk.
Environmental Sustainability	Programs should not be adverse to environmental stewardship.
Adaptation and Adjustment	Programs should not be adverse to market-oriented adjustments.
Minimal Overlap and Duplication	Programs should not duplicate purpose and payments.
Minimal Moral Hazard	Programs should minimize moral hazard.

Funding Principles

Non-Distorting Distribution of Government Funds	Allocation of funding should not be distorting to regional/commodity comparative advantage.
Cost-Sharing	Producers and both orders of government should share program costs, including any premiums, deficits, and administration.
Capping	There shall be limits on the level of assistance provided to individual producers.
Equity	The financial resources of the Government of Canada should be allocated to provide, over time, the same level of protection for farmers in similar circumstances.

8.5 Funding

Federal funding for risk management programming

Canada's commitment under this Agreement is to provide funding for risk management programming across all Signatory Provinces as follows:

- $600 million plus $65 million for General Risk Management Programming as allocated to Signatory Provinces in each of the fiscal years 2000-01, 2001-02, and 2002-03 plus an additional amount in annual funding committed by Canada to maintain the allocations to Saskatchewan, Manitoba and New Brunswick at not less than $195.2 million, $75.6 million and $4.9 million respectively;

- $435 million for Income Disaster Assistance Programming for each of the 2000, 2001, and 2002 stabilization (tax) years.

Federal-provincial cost-sharing for risk management programming

Over the period the Agreement is in place, cumulative funding by the Province for jointly agreed to General Risk Management Programming and Income Disaster Assistance Programming will be a minimum of two-thirds of Canada's funding in the Province and as further outlined in subsections 6.1 and 7.3.

For greater clarity, it is understood that the funding commitments of Canada and the Province under this Agreement are subject to the parties obtaining any necessary legislative approvals required to meet these commitments. In the event that such approvals are not forthcoming, Canada's or the Province's funding may be adjusted, in agreement with the other party, to maintain the overall cumulative cost-sharing formula for General Risk Management Programming and Income Disaster Assistance Programming over the life of this Agreement in the Province.

The parties commit to work together to ensure the cost-sharing commitments are maintained.

8.6 General Risk Management Programming

Federal-provincial cost-sharing for General Risk Management Programming

Over the period the Agreement is in place, cumulative funding by the Province for jointly agreed to General Risk Management Programming will be a minimum of two-thirds of Canada's funding in the Province or at a level that satisfies the overall cost-sharing commitment under subsection 5.2.

Canada's and the Province's funding includes expenditures for premium contributions, direct payments to farmers, administrative costs, program deficits, and any other fiscal requirements relating to General Risk Management Programming, subject to this Agreement.

For greater clarity, it is understood that the funding commitments of Canada and the Province under this Agreement for General Risk Management Programming are subject to the parties obtaining any necessary legislative approvals required to meet these commitments.

Allocation of federal funding for General Risk Management Programming

Federal funding for General Risk Management Programming as set out in subsection 5.1 shall be allocated in the following manner for each fiscal year:

(a) The allocation for Newfoundland and Labrador for General Risk Management Programming shall be $2.35 million for each fiscal year.

(b) After deducting the allocation for Newfoundland and Labrador stipulated in paragraph (a) from the $665 million, the remaining $662.65 million shall be allocated for each fiscal year among all Signatory Provinces, with the exception of Newfoundland and Labrador. The share of allocated federal funding for each of these Signatory Provinces shall be calculated for each fiscal year as:

- its proportionate share of one-half of the remaining $662.65 million, on the basis of its share of the moving average of market receipts, excluding receipts from dairy products, poultry and eggs, over the preceding five years (starting with the period 1994 through 1998) as published by Statistics Canada for all Signatory Provinces exclusive of Newfoundland and Labrador; plus

- its proportionate share of one-half of the remaining $662.65 million, on the basis of its share of the moving average of farm cash receipts, excluding receipts from dairy products, poultry and eggs, over the preceding five years (starting with the period 1994 through 1998) as published by Statistics Canada for all Signatory Provinces exclusive of Newfoundland and Labrador.

(c) The allocations to Saskatchewan, Manitoba and New Brunswick for General Risk Management Programming resulting from the methodology set out in paragraph (b) shall be augmented for each fiscal year by whatever amount is required to bring their respective total allocations to not less than:

• Saskatchewan	$195.2 million
• Manitoba	$ 75.6 million
• New Brunswick	$ 4.9 million

Federal funding for the NISA and Fall Cash Advance Programs

The federal cost of the NISA Program and the federal cost of the Fall Cash Advance Program in the Province shall be funded out of the Province's allocated share of federal funding. The arrangements for funding the NISA Program in the Province shall remain as set out in the Canada-Ontario Framework Agreement on Agricultural Safety Nets dated July 4, 1996; these arrangements are subject to change by mutual agreement of the two parties. These arrangements shall apply to the funding of the NISA Program as it was in place in the Province at the time of signing of this Agreement. Both the NISA Program and the Fall Cash Advance Program are consistent with the program and funding principles set out in subsections 4.1 and 4.2 and shall be funded on a demand-driven basis.

Federal funding for province-based programming

The remaining federal funds allocated to the Province may be used to fund other jointly agreed to nationally-based programs or jointly agreed to province-based programs, including crop production risk management programs and industry development programs, where such programs are consistent with the program and funding principles set out in subsections 4.1 and 4.2.

If Canada agrees that a province-based program is eligible for federal cost-sharing or eligible to be counted towards the Province's cost-sharing commitments, then the same or similar program proposal made by another Signatory Province shall also be so considered for acceptance by Canada, provided that the program is consistent with the program and funding principles set out in subsections 4.1 and 4.2. Conversely, if Canada decides that a province-based program is neither eligible for federal cost-sharing nor eligible to be counted towards the Province's cost-sharing commitments, then the same or similar program proposal that is not consistent with the program and funding principles set out in subsections 4.1 and 4.2 as made by another Signatory Province shall also be so viewed by Canada.

Canada and the Province shall collaborate on an ongoing basis in establishing the priorities to be addressed and the province-based or nationally based programs that best meet those priorities.

Provincial funding

Funding required for General Risk Management Programming which is above the federal funding allocated to the Province shall be the responsibility of the Province. Additional provincial funding of General Risk Management Programming shall be counted towards the Province's cost-sharing commitments under this Agreement if the programs are consistent with the program and funding principles set out in subsections 4.1 and 4.2.

Management and decision-making

All further details on the design and operation of nationally and province-based cost-shared programs shall be addressed in separate multilateral or bilateral federal-provincial agreements, as the case may be. Canada shall only enter into such agreements subject to the allocation of federal funding for programs in the Province as outlined in subsection 6.2.

8.7 Income Disaster Assistance Programming

Federal funding for the Spring Cash Advance Program

The federal cost of the Spring Cash Advance Program shall be deducted from the $435 million in federal funding available for Income Disaster Assistance Programming for each of the 2000 and 2001 stabilization (tax) years.

Federal funding for Income Disaster Assistance Programming

The funds remaining following the deduction required by subsection 7.1 shall be used to fund the federal share of Income Disaster Assistance Programming costs under subsection 7.3 and paragraph 7.4(a) for the 2000, 2001, and 2002 stabilization (tax) years. Federal funding for Income Disaster Assistance Programming shall be paid directly to farmers or to the Province if it is delivering the assistance provided under the Federal Disaster Program Conditions. Income Disaster Assistance Programming shall be funded on a demand-driven basis, subject to any proration required under subsection 7.5.

Federal-provincial cost-sharing of Common Disaster Program Conditions

Canada and the Province shall fund Income Disaster Assistance Programming on the basis of Common Disaster Program Conditions that apply nationally. Changes to the Common Disaster Program Conditions may only be made on agreement of Canada and the Signatory Provinces. The Province shall fund this Program at two-thirds of Canada's funding in the Province (i.e., a 60:40 federal-provincial cost-sharing ratio). The provincial funding commitment shall be established as sixty-six and two-thirds percent of the forecasted federal costs of the Common Disaster Program Conditions in the Province for the upcoming stabilization (tax) year. Canada and the Province shall agree, in writing, to this committed funding level by September 1 of the year to which the funding applies.

For greater clarity, it is understood that the funding commitments of Canada and the Province under this Agreement for Income Disaster Assistance Programming are subject to the parties obtaining any necessary legislative approvals required to meet these commitments.

Federal-provincial funding of Supplemental Disaster Program Conditions

Canada, the Province or both parties may offer Supplemental Disaster Program Conditions if they are consistent with the program and funding principles set out in subsections 4.1 and 4.2. Canada shall manage its funding for Supplemental Disaster Program Conditions as follows:

(a) Canada commits to consult with all Signatory Provinces prior to funding payments under Supplemental Disaster Program Conditions which are implemented nationally from its funding for Income Disaster Assistance Programming pursuant to subsection 7.2.

(b) Canada and a Province may agree to offer Supplemental Disaster Program Conditions that are not implemented nationally. Canada's funding shall come from the allocation of federal funding for General Risk Management Programming in the Province.

Proration of payments

Federal payments for Income Disaster Assistance Programming shall be prorated on the same basis across all Provinces if, on an aggregated basis, the total amount of federal payments for a stabilization (tax) year to which farmers are eligible on the basis of the Federal Disaster Program Conditions exceeds the total amount of federal funding committed for Income Disaster Assistance Programming for the stabilization (tax) year.

The Province may prorate its share of payments for Income Disaster Assistance Programming for a stabilization (tax) year if: (i) the total amount of provincial payments for a stabilization (tax) year to which farmers are eligible on the basis of the Provincial Disaster Program Conditions exceeds the total amount of provincial funding, or (ii) on the same basis as federal payments are prorated for a given stabilization (tax) year if the Province has agreed to fund sixty-six and two-thirds percent of the actual federal cost of payments under the Common Disaster Program Conditions in the Province.

The first draw on available federal and provincial funding for Income Disaster Assistance Programming shall be to fund payments under the Common Disaster Program Conditions, as agreed.

Management and decision-making

All details on the design and operation of cost-shared Income Disaster Assistance Programming, including the establishment of Common Disaster Program Conditions across all Signatory Provinces for both the federal and provincial portion of the programs, shall be addressed in separate multilateral or bilateral federal-provincial agreements, as the case may be. These details shall be established pursuant to a methodology that is transparent to all Signatory Provinces and consistent with the program and funding principles set out in subsections 4.1 and 4.2.

Canada shall enter into such agreements subject to the federal funding available for Income Disaster Assistance Programming set out in subsection 7.2 and subject to proration of federal payments if required.

8.8 Management of the Agreement

Financial and program management

Canada shall notify all Signatory Provinces as to their respective shares of allocated federal funding under subsection 6.2 of this Agreement. Canada shall also provide an accounting to the Province of estimated and actual surpluses or deficits in the Province's allocation of federal funding for each fiscal year. The Province agrees to share with Canada all information necessary to allow Canada to provide this accounting. The notification and accounting shall be provided by no later than November 30 for the upcoming fiscal year. For the 2000-01 fiscal year, Canada shall provide such notification to each Signatory Province within thirty (30) days of the signing of this Agreement.

Evaluation of the Agreement

The operation of this Agreement shall be evaluated by Canada and all Signatory Provinces pursuant to the terms provided in Annex A to this Agreement - Terms of Evaluation. This evaluation shall be completed by March 31, 2002.

Review of NISA

As a national program under this Agreement, the NISA Program shall be reviewed on the basis of terms as agreed to by Canada and all Signatory Provinces, with a view to ensuring its effectiveness and to strengthening its integration with Income Disaster Assistance Programming. This review shall be completed by December 1, 2000. Any changes to the NISA Program to be implemented as a result of this review shall be approved by Canada and all Signatory Provinces, according to the amending formula in effect at the time of signing this Agreement under the Federal-Provincial Agreement Establishing the Net Income Stabilization Account Program.

Transparency

Transparency between Canada and all Signatory Provinces is required to ensure that the terms of this Agreement are respected.

Canada and the Province agree to share with all Signatory Provinces program proposals brought forward for federal funding or to be counted towards the Province's cost-sharing commitments under this Agreement, providing an opportunity for comment by other Signatory Provinces. For greater clarity, the requirement to so notify all Signatory Provinces applies to the consideration of programming under subsections 6.4, 6.5 and 7.4.

Canada shall maintain a record of all multilateral or bilateral agreements concluded under the terms of this Agreement. Canada shall provide copies of these documents to all Signatory Provinces on a timely basis.

8.9 General Provisions

Coming into force

This Agreement shall come into force on the date that it is signed by the latter of the authorized representatives of Canada and the Province.

Duration

This Agreement shall be in place over the fiscal years 2000-01 to 2002-03 to fund General Risk Management Programming and to fund the Income Disaster Assistance Programming for the 2000, 2001, and 2002 stabilization (tax) years. This Agreement may be extended on agreement of Canada and the Province.

Amendment

Canada or the Province may propose, in writing, an amendment to this Agreement. All amendments shall include an effective date or period for the coming into force of the amendment. The party proposing the amendment shall notify, in writing, all Signatory Provinces of any proposed amendment, providing an opportunity for comment by other Signatory Provinces. Following these notifications, Canada and the Province may amend this Agreement, in writing.

Termination

This Agreement may be terminated, in writing, by Canada or the Province giving notice to the other party prior to the beginning of the last fiscal or stabilization (tax) year for which that party will continue under the Agreement. In the event that this Agreement is so terminated by either party, that party agrees to consult with the other party on measures necessary to maintain the continuity of existing programming on an interim basis.

Transition Measures

The Canada-Ontario Framework Agreement on Agricultural Safety Nets dated July 4, 1996 shall be terminated upon the coming into force of this Agreement. All federal-provincial agreements signed under the terms of the former Framework Agreement shall come under the terms of this Agreement and remain in force until their appointed date(s) of expiration, unless otherwise agreed between Canada and the Province.
Any surpluses or deficits in funding allocated to the Province under the former agreement shall be brought forward under this Agreement.

IN WITNESS WHEREOF this Agreement is duly executed by the authorized representatives of the parties.

WITNESS	SIGNATURE	DATE
_____	_____ Minister of Agriculture and Agri-Food Canada	_____
_____	_____ Minister of Agriculture, Food and Rural Affairs Ontario	_____

A9. Terms of Evaluation

The evaluation of this Agreement shall provide an assessment of, at a minimum, the following three main areas:

9.1 Funding

- Whether the allocation of federal funding to Signatory Provinces provides a level playing field and offers meaningful General Risk Management Programming to farmers.
- The impact or potential impact on the relative level of federal and provincial funding for Income Disaster Assistance Programming for farmers in all Signatory Provinces.
- The ability of federal and provincial funding to meet the objectives and principles of the Agreement and an assessment of how the cost-sharing formula impacts Signatory Provinces.

9.2 Programs

- The extent to which the objectives and principles of the Agreement are met by the General Risk Management Programming and Income Disaster Assistance Programming offered under the Agreement, both at the individual program level and as a set of programs. This evaluation will also assess how efficient and effective each program and the set of programs is in achieving specific program objectives such as reducing income variability, improving liquidity, reducing bankruptcy, and reducing the impact of risk on farms.

9.3 Management of the Agreement

- The extent to which transparency has been achieved under the Agreement. This includes an assessment of the application of federal and provincial policy decisions with respect to the objectives and principles of the Agreement.
- The extent to which the programming offered by Canada and all Signatory Provinces has met the program and funding principles under subsections 4.1 and 4.2.
- The impact of adjustment programs and other related programs on the need for General Risk Management Programming. This includes the extent of integration of these programs with General Risk Management Programming, including an assessment of any program gaps and duplication.
- The relative level of federal and provincial direct and indirect support across commodities and regions and the ability of farmers to access this support.

A10. Financial Risk Management Policy And Programs Objectives and Principles

10.1 Objective

Current Objective

To promote the management of risk and reduce its impact, including, but not limited to, income stabilization. In pursuing this objective, the parties intend:

- to share with farmers the management of normal business risk through funding of programs, and promotion of private sector risk management tools and best management practices; and
- to target Income Disaster Assistance Programming to those farmers facing the most severe income variation, where variation is seen as up to a three to five-year period.

Possible Alternatives

To provide tools to farmers where private instruments for financial risk management are not reasonably available, and to share in some of the economic risks faced by the sector
Or
To provide tools to farm businesses where private instruments for financial risk management are not reasonably available, and to share in some of the economic risks faced by the sector, as well as to eliminate the need for ad hoc payments.
Or
To provide tools to farm businesses where private instruments for financial risk management are not reasonably available, and to share in some of the economic risks faced by the sector, as well as to minimize the need for ad hoc payments.
Or
To provide tools to farm businesses where private instruments for financial risk management are not reasonably available, and to share in some of the economic risks faced by the sector, as well as to avoid the need for ad hoc payments.

And
To apply safety net principles to policies and programs developed jointly and individually by both orders of government.

10.2 Principles

Principles for Governments and Partners:

Production and Market Neutrality

Current Principle
Programs should not influence farmers' production and marketing decisions and should not distort regional comparative advantage.

Possible Alternatives
Programs should not influence farmers' production and marketing decisions.

And/Or
Programs should encourage the use of privately available risk management tools.

Trade Neutrality

Current Principle
Programs should minimize countervail risk.

Possible Alternatives
Programs should meet the green criteria.
Or
Programs should meet criteria as set out in WTO
Or
Programs should meet criteria as set out in WTO text, and minimize countervail risk.

Environment

Current Principle
Programs should not be adverse to environmental stewardship.

Possible Alternatives
Programs should not result in production practices which compromise the environment.
Or
Programs should contribute to improve environmental stewardship.
Or
Eligibility for safety net programming should be contingent on meeting stated environmental requirements.
Or
Eligibility for safety net programming will be contingent on meeting stated environmental requirements.

Food Safety (New)

Possible Alternatives
Programs should not be adverse to food safety.
Or
Programs should not result in production practices which compromise food safety.
Or
Programs should contribute to improved food safety.
Or
Eligibility for safety net programming should be contingent on meeting stated food safety requirements.
Or
Eligibility for safety net programming will be contingent on meeting stated food safety requirements.

Adjustment

Current Principle
Programs should not be adverse to market-oriented adjustments.

Possible Alternatives
Programs should be neutral to market-oriented adjustments.
Or
Programs should actively encourage market-oriented adjustments.
Or
Programs must encourage market-oriented adjustments.

Innovation (New)

Possible Alternatives
Programs should not be adverse to adoption of technological innovations.
Or
Programs should actively encourage the adoption of technological innovations.
Or
Programs must encourage adoption of technological innovations.

Minimal Overlap and Duplication of Government Programs

Current Principle
Programs should not duplicate purpose and payments.

Possible Alternatives
Programs should eliminate duplication of purpose and payments.
Or
Programs must eliminate duplication of purpose and payments.

Minimal Overlap and Duplication with Private Sector Tools (New)

Possible Alternatives
Programs should not discourage the use of private sector risk management tools.
Or
Programs should encourage the use of private sector risk management tools.
Or
Programs should not discourage the development and use of private sector risk management tools.
Or
Programs should encourage the use and development of private sector risk management tools.

And
Public programs should not crowd private sector risk management tools out of the marketplace.
Or
Public programs should not compete directly with private sector risk management tools.
Or
Public programs must not compete directly with private sector risk management tools.

Minimal Moral Hazard

Current Principle
Programs should minimize moral hazard.

Possible Alternatives
All public programming should minimize the potential for program abuse.
Or
All public programming must minimize the potential for program abuse.

Producer Accountability / Cost Sharing

Current Principle
Producers and both orders of government should share program costs, including any premiums, deficits, and administration.

Possible Alternatives
Producers must make a conscious decision to participate in publicly funded programs. This decision is based on a paid premium by the producer to show risk and cost sharing.

Risk Sharing (New)

Possible Alternatives
Producers and both orders of government should share some of the financial risks faced by the sector.
Or
Producers and both orders of government will share some of the financial risks faced by the sector.
Or
Producers must/should accept the majority of financial risk they face in the business of farming. Governments will/may share a portion of this financial risk to the extent that the other principles of this agreement deem appropriate and allow.
Or
Since producers receive the majority of benefits from the business of farming they too must/should accept the majority of financial risk they face. However, governments will/may share a portion of the uncontrollable financial risk to the extent that the other principles of this agreement deem appropriate and allow.

Equity

Current Principle
The financial resources of the Government of Canada should be allocated to provide, over time, the same level of protection for farmers in similar circumstances.

Possible Alternatives
Financial resources provided by both orders of government should be allocated to provide, over time, for the same level of protection for farmers in similar circumstances.
Or
Over time 50% of government funding shall be allocated based on value of output across the country. The remaining 50% of government funding will be directed to farmers based on whole farm stabilization (need).
Or
The financial resources of the Government of Canada should be allocated to provide, over time, the same level of risk protection for farmers.
Or
The financial resources of the Government of Canada should be allocated to provide, over time, the same proportion of risk protection for farmers.

Program Development (New)

Possible Alternatives
Programs should be developed in conjunction with the sector, including consultation with other partners and stakeholders.
Or
Programs must be developed in conjunction with the sector, including consultation with other partners and stakeholders.

Targeting (New)

Possible Alternatives
The financial resources of governments should be used to address the whole farm income stability of individual farming entities.

And/Or
The financial resources of governments should not be used to address commodity specific issues.
Or
The financial resources of governments must not be used to address commodity specific issues.

Capping

Current principle
There shall be limits on the level of assistance provided to individual producers.

Possible Alternative
There shall be limits on the level of assistance provided to individual producers and farming entities.

Commercial Agriculture (New)

Possible Alternatives
The focus of financial risk management programs and policies should be the commercial agriculture sector.
Or
Income based programs will be focused on commercial agriculture. Caps will be used where appropriate to address wealth creation as opposed to income stabilization. (To replace Capping and Commercial Agriculture Principles)

10.3 Principles among Governments

Cost Sharing (New)

Possible Alternative
The underwriting of financial risk management programs for the sector will be shared by both levels of governments in a consistent manner.

Non-distortionary

Current Principle
Allocation of funding should not be distorting to regional/commodity comparative advantage.

Possible Alternatives
Programs, and the allocation of federal funds among provinces, should not distort regional/commodity comparative advantage within or among jurisdictions.
Or
Programs, and the allocation of federal and provincial funds, should not distort regional/commodity comparative advantage within or among jurisdictions.

Ad Hoc

Possible Alternatives
Both orders of governments should make every effort to resist providing ad hoc support to the sector.
Or
Both orders of governments must make every effort to resist providing ad hoc support to the sector.
Or
All other avenues of support should be exhausted before governments take ad hoc measures.

A11. Summary of Producer Concerns Regarding Farm Income Support Programs

Crop Insurance:

- Coverage levels are insufficient. Cash costs exceed coverage when prices are low.
- Producers of new crops, or crops with small acreage sometimes do not have a CI plan.
- The 10-year yield average is a bias against the adoption of new technology. Coverage levels should reflect new technology and/or improved management techniques.
- The reduction in coverage levels (or premium discounts) after successive claims due to drought exacerbates the gap between insurance indemnity and production costs.
- Producers want higher yield coverage (discounting effect of disasters on yield coverage).
- Long term average yield (LTAY) calculations should ignore disastrous years.
- Unit prices are not high enough particularly where cost of production is higher than market price. This is a serious flaw for crops which are grown for home consumption, not cash marketing.
- When prices are low, producers complain about not being able to cover their "costs."
- Insurance prices should better reflect market prices (particularly when prices are high).
- A revenue insurance component should be added to more adequately cover a producer's cash costs or even total production costs.
- Producers would like field insurance.
- Pasture, hay and green feed insurance could be enhanced.
- Producers would like more options/customization of the program design.
- Producers want more risk splitting ability.
- Producers would like to be able to purchase smaller deductible (with some cost sharing).

CFIP, AIDA, FIDP:

- The programs are complicated. Payment and coverage is uncertain because many adjustments may take place; i.e. reference period if changing production or ownership structure.
- Considerable cost (i.e. paying accountant) to apply and may not get anything out of it (large decline ratio).
- It doesn't pay out enough for a drop in income that is significant to the producer but less than 30%.

- Offsetting losses in one enterprise with another enterprises is unfair, especially when this is not done for off-farm income.
- Producers don't agree with combining farms (offsetting one persons claim with another family member's income) just because some transactions are shared.
- Coverage does not reflect current farm's operations as structural adjustment calculation is imperfect.
- Do not subtract the NISA contribution.
- Reduce the time frame to establish payment eligibility and issue payment.
- Enable the calculation of a deemed reference margin by CFIP administrators for producer who have been affected by successive years of poor crops and resulting low income.
- Use a variable or longer period than three years to compute an average to determine program margins.
- Negative margins should be covered.
- The programs are not properly linked. The link should be of the type that existed for AIDA in 1998 and 1999, (i.e. ENS deduction of 3% from AIDA payment, regardless of whether the producer participates in NISA or not). Quebec wants the same type of link with crop insurance. It wants the programs to be linked in such a way as to encourage participation in these programs.
- Program treatment of diversified vs. specialized farms creates a disincentive to diversify.
- Payments are viewed as arbitrary.
- There should be more benefits to those that do not take other actions to reduce risk and stabilize income.

NISA:

- Enable NISA funds to serve as collateral.
- A carry forward of unused contributions should be allowed.
- The program does not benefit new producers
- Producers can't access their funds when needed. Triggers may be inadequate or don't want to take the risk with exceeding allowable amount using the interim withdrawal. A more realistic benchmark is desired. Requiring gross margins to fall below average gross margins for the past 5 years is inadequate.
- The contribution rates are inadequate (3%). They don't allow a significant reserve to be built up for security.
- The annual contribution limit based on $250,000 ENS is too low.

- A large number of producers have depleted accounts and cannot use NISA to stabilize their income. Accounts take too long to rebuild once depleted. The ENS calculation favours horticulture, grains, and oilseeds but does not work for livestock sectors.

- Producer contributions should be based on gross sales values, (i.e. values prior to the deduction of freight, handling, cleaning and any other charges).

- The tax treatment should be changed. Do this instead of maintaining the interest incentive. The fact that account withdrawals are considered investment income curbs withdrawals. Producers thus see NISA as an investment and retirement fund. Deposits should be deductible from taxable income and withdrawals should be considered regular income.

- Eligible expenses under NISA should be expanded to include all expenses eligible for income tax, such as depreciation and property taxes.

- The taxable portion of NISA withdrawals should be designated as farm income so that negative margins may be used to offset tax liabilities.

- The cap should be raised. The cap has remained the same for 10 years while farms are growing.

- There are countervail concerns.